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DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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CALENDAR FOR JANUARY.

OR eleven successive holiday seasons we have been permitted, as Editor, to wish the readers of the *New England Farmer*, a Happy New Year, and to express a few thoughts suggested by January, and by the opening of a new volume.

Eleven years! How much of mingled good and ill, of hope and fears, of resolutions and non-performance, of success and failure, is comprehended in this record. At first thought, it seems but a brief period since *January*, 1852, and yet, if we stop to measure it by events and changes of deep interest to ourselves, individually, it will seem much less brief to most of us.

We love to review and contrast these years, and to dwell upon the evidences which they afford of progress and improvement in regard to the soil and the mind, to the field and the house. But upon the commencement of this new period of time, it is both customary and proper to confine our thoughts, mainly, to the incoming and outgoing years.

At this point in the calendar, it is sometimes said that every body thinks; that there is a sort of necessity imposed on us all, to look back on the past, and forward to the future. The name of the first month of the year might imply that mankind have always begun the year in this thoughtful way. January being derived, as the books say, from "Janus," an old Roman Deity, who presided over the beginning of every thing, opening the year and the seasons, as well as all great gates and doors, and to whom supplications were addressed at dawn of every day, and sacrifices offered at the beginning of every year. This god was represented with two faces, one looking back upon the year past, and the other forward to that to come, and to him was the first day of the year especially sacred.

Whether, then, we contemplate the events of the old year, or look forward to those of the new, our thoughts unavoidably centre around that topic which is first and uppermost in the minds of all.

Our government is at war, but not with a foreign foe. From external enemies it has nothing to fear. The past history of our country has decided two long mooted questions; one as to the capacity of the people to establish a practicable form of self-government; the other, as to their ability to defend it against attacks and opposition from without. A still more important question remains for solution: Can such a government be maintained against the intrigues of the ambitious, the treachery of the unprincipled, and the rebellion of the lawless, among its own citizens? One million of our countrymen have risen up as disputants in this fearful controvery, which is witnessed by an audience to whom the address of the madman, "Attention, the whole world," is but a modest salutation. We can hardly realize that this is no mere "war of words," but a fierce and deadly struggle—a civil war—which has already caused "tears in the houses, as well as blood in the field." Our hope as to its final result, is as firm as our faith in man's capacity for self-government. We cannot believe that the few are always to govern the many, nor that free government has as yet proved a failure.

This, however, is not the time to "talk politics." Our business is with the farm—the farm

in the midst of a New England winter. Rather an unpromising topic, especially where one feels that he has, year after year, given expression to pretty much such thoughts as the same objects will be most likely to suggest again to the same mind.

We have sometimes thought that if editors could agree upon some plan by which occasional "exchanges" might be effected with their "brethren," or by which they could, after the manner of the Methodist ministry, "ride a circuit," so that no one would be compelled to write for the same "people" more than one or two years in succession, our editorials might present a greater variety of thought and novelty of expression. But in the absence of such arrangement, we may rely on the long-tried good nature of our readers to pardon any repetition which they may detect.

Well, then, on this NEW YEAR'S Day, we shall find, if we look into the almanac, that this earth of ours, or, as it appears to us, the sun, commenced his year's work a few days ahead of us; having swept around the southern curve of his track, and passed the half-way station of winter solstice about a week before we arrived at our "place of beginning." The day is already a few minutes longer than at the shortest, but the sun is still so low in the southern sky that we do not expect his approach towards our northern latitudes will sensibly affect the temperature for some time to come. Indeed, experience has taught us to expect, on the contrary, that

> "When the days begin to lengthen,
> Then the cold begins to strengthen."

And before the month goes out, we usually find that it is full strong enough for our comfort,—or, at least, we are apt to think so, and, perhaps, to grumble about it. We well know that these long winter evenings do tax the patience. Many feel that the history of their lives might be written in two lines:

"Worked hard all summer to raise enough to feed themselves and cattle during winter."

But, do we not complain too much? Is a milder climate, even if at our bidding, desirable? For what section of this earth, after all, would we exchange New England? Since commencing this article, we have read an extract from a work on "The Manners of the Modern Egyptians," in which the writer alludes to some of the effects of climate upon character. Life at Grand Cairo, he says, is rather passive, than active. Nine months of the year the body is oppressed by heat; the soul in a state of apathy, sighs for calm tranquillity. Inaction under a temperate climate is painful; here repose is enjoyment. The most frequent salutation at meeting or parting, is, "*Peace* be with you." The American, born under an ever-varying sky, is continually receiving new impressions, which keep his mind as continually awake. He is active, impatient and agitated, like the atmosphere in which he exists; while the Egyptian, feeling the same heat, the same sensation, two-thirds of the year, is idle, solemn and patient. Effeminate indolence is born with the Egyptian, grows as he grows, and descends with him to the grave. It is the vice of the climate; it influences his inclinations and governs his actions. The sofa, therefore, is the most luxurious piece of furniture of an apartment. Their gardens have charming arbors and convenient seats, *but not a single walk!*

Such is the testimony of northerners generally who visit southern countries. The Rev. J. S. GREEN, missionary at the Sandwich Islands, whom our readers will remember as the writer of several the *Farmer*, says the Hawaiian fields might "laugh articles on Hawaiian agriculture, published in with abundance," but are fruitful only in noxious or useless weeds. "And yet we all see that the nation is dying out and out, commerce languishing, every thing and every body suffering, because scarcely any one is willing to cultivate the earth." After speaking of the natural indolence of the Islanders, generally, and of the astonishment of the natives, who formerly cut their grain with a *case-knife*, at witnessing the velocity with which one of Hussey's machines marched through a field of wheat, he exclaims: "Dear old New England, land of my birth, of my childhood and youth! well may thy sons be thankful that they were born and cradled among thy hills, instead of first breathing the balmy air of a southern climate. If I have any hardness, any thing like endurance, I owe it, under God, to having felt the bracing atmosphere of the north, and to having become inured to the tug of labor on the hillsides and in the valleys of Vermont."

Let us, then, enter upon a NEW YEAR, thankful for the cold; thankful for the rough admonitions which it gives us to bestir ourselves or freeze to death!

WATER FOR FATTENING SWINE.—A correspondent of the *Rural New-Yorker*, who has tried the experiment of fattening swine with and without water, gives the result as follows:

Last fall I saw in the *Rural* that a farmer said he had proved by experience that hogs would fatten faster, and on a considerable less amount of corn, without drink, so I thought I would try the experiment. I fed sixteen shoats on dry corn for nearly two months without water. They acted like crazy creatures, and a common rail fence would not stop them. They ate but little corn, and I think did not gain a pound. I then gave them all the water they wanted, and I could see they commenced gaining immediately, and were as contented as any hogs. I have proved, to *my* satisfaction, at least, that fattening hogs require water.

For the New England Farmer.

INFLUENCE OF NEWSPAPERS.

MESSRS. EDITORS:—I am now over 82 years old, and remember the wars of this country, from the revolutionary to the insane rebel war of the south. I remember when there were but two newspapers published that reached the country from Boston, viz., the *Independent Chronicle* and *Columbian Sentinel*. The *Chronicle* was the organ of the republican party, and the *Sentinel* the organ of the federal party. Their editors were men of talents, faithful to their parties, not sparing of any invective which would redound to the glory of either cause. My father took the *Chronicle*, and I well remember the account it gave of the struggle which took place at the convention of delegates from the twelve old States while forming the confederacy. The weekly *Chronicle* gave us an illustration of the progress going on at the convention by twelve pictures of prostrate pillars at the beginning of the meeting of the delegates. Each pillar was to represent a State; ten of the pillars advanced from different positions of elevation from week to week, till they arrived at an erect posture; the other two finally became erect after a sufficient course of "compromises."

What a strong impression pictures make upon the minds of children. It is astonishing to witness the progress which newspapers have made from that time to the present in their increase in numbers and vastness of circulation. As long ago as 1787, there were but few newspapers taken in my native town, which would compare with the rest of the towns throughout New England for the encouragement bestowed upon the editors of newspapers at that time. The *Chronicle* or *Sentinel* was taken by the clergyman, the justice of the peace, and perhaps a few others who were able, and fond of reading. Political proclivity made the decision in the choice of newspapers. I presume there are hundreds of newspapers now distributed in the country where there was but one then. At that time (1787,) and for years afterward, each subscriber had to send to the office to get his paper, and when travelling was bad, they would lay behind one or more weeks.

Libraries are useful for standard works, but they will not compare with newspapers for spreading light and knowledge among all classes of people. Where people have the means of being instructed in true knowledge, there is but little danger of their being humbugged by demagogues or secessionists for any great length of time. It has been but a few years since an agricultural paper could be sustained in New England; now there are three or more published in Boston, which are eagerly read and are exerting an influence upon the farming community which is invaluable; they are doing good in various ways; they are a school of instruction to the whole country, except those who are already infallible. Knowledge which formerly could be conveyed only from one individual to another, is now spread broadcast at an impression. The farming interest is held in much higher estimation than formerly, through their means; the correspondents to these papers, though scattered over the country, almost become acquainted. A good liberal newspaper is an angel which scatters light in all our paths. The difference between newspapers of good influences and bad influences is very striking; the former is governed by the principles of practical Christianity, which tends not to unprofitable controversy, but inculcates the love of peace, charity, and the exercise of good-will among all people, without regard to sect, creed, or denomination. The latter issues scurrility, slander, misrepresentation, doctrinal theories and bigotry, from which grow every evil work, even to persecution for conscience sake. Such papers stir up the evil passions of men even to warfare. Contests much oftener originate from theoretical doctrines founded on absurdity, than from any rational causes. Great is the influence of newspaper editors for good or for evil.

Free schools and free presses are great annoyances to despotism, as well as the safe-guard and defence of liberal principles. In all the States that uphold the free school system, and lay no restraint upon the newspaper presses, but encourage the dissemination of useful knowledge among all classes of people through newspaper reading, there will be but little danger of the predominance of despotism over republicanism. If the free press had even been tolerated with other free institutions for the instruction of the ignorant in the slave States, this calamitous and destructive war would not have taken place. Ignorance is liable to suffer all manner of imposition by shrewd, ambitious, selfish and designing tyrants. While newspapers are allowed to circulate, knowledge cannot be confined to self-important dictators. Success, then, to a free press, and the means of knowledge distributed to all classes of people. SILAS BROWN.

North Wilmington, December, 1861.

TO KEEP RABBITS FROM TREES IN WINTER.—Two years ago I found the rabbits gnawing my choice trees severely. I had seen several remedies recommended, such as tying on strips of lath, bark, wrapping with straw, &c. But I thought some kind of a wash would be much cheaper, and less work to put it on. I took a small quantity of tobacco and made a strong tea of it; then a thick lime whitewash, and stirred in the tobacco. With a brush or swab, a man can wash 1000 in a day. It proved a remedy with me. My rabbits, although uncivilized, are too nice to chew tobacco. If storms wash off the mixture, wash them again. It does not cost much.—S. FOSTER, *in Country Gentleman.*

THE HOMESTEAD.—This paper, published at Hartford, Ct., has been coming to us with great regularity for six years, and ever with sound and cheering words. We have read it with profit, and copied from it into our columns with pleasure. The publisher has discontinued it, finding that, through a "seductive, but most unwise system of credits," he could not get back the outlay which it cost. Its subscription list is to be merged with that of the *American Agriculturist*, which excellent paper is to be sent to the late readers of the *Homestead*. In this union we hope all parties will reap an abundant reward for their valuable labors. Mr. WELD, late editor and publisher of the *Homestead*, we learn, has become an associate ditor of the *American Agriculturist.*

For the New England Farmer.

MORE ABOUT THE WHEAT TADPOLE.

After studying the habits of this curious little fellow for two months, he looks tremendous large to me. As the wheat has been threshed, I find it has suffered very much from the depredations of the tadpole and other insects this season. In many of the mountain towns, it is an entire failure, and few have more than half a crop. If one of this class, called the Aphis, has caused so much fear in the cotton-growing States, and called out so much talent to investigate its nature, why are we not awake? If he progresses as fast as pests generally do, we shall have famine with our war, another year, unless we are trying to head him off.

I am conversant with the opinions of many who have devoted much time to the study of the Cotton Aphis, his character, habits, &c., and consider Townsend Glover's description in the Patent Office Report for 1855, pages 68 and 69, the best of any—still I am not satisfied with that even. I have seen his lady-birds, lace-flies, syrphus and ichneumon on many pieces of grain, before I ever saw a wheat tadpole, and have seen that they were increasing yearly. This year I saw uncountable numbers of them on the grain in various places, and watched them closely for weeks, but I think only the lace-fly preys upon the tadpole in any way.

The other day I strolled up to the stock farm of —— Cushing, of Belmont, situated in Wayland. His farmer told me they raised 200 bushels of Java wheat this season, and while talking with him in relation to it, I made the following discovery. Said farmer told me the things came on to their wheat *late*, and did little, or no harm. That when they cut it, there was not one to be found on it; that they put it into a mow overhead, and about two weeks after, he was up there after hen's eggs, and, as he supposed at the time, got completely covered with hen-lice. In another week he was up there again, and there were bushels of the same things all over every thing, of all sizes and colors, with wings and without wings; that he watched them closely, and found them swarming about the windows trying to get out as soon as they got their wings; that in four weeks after he first saw them, looking like the smallest hen-lice, the barn and everything in it, was literally covered with a small, greenish worm, and the things had turned into them; that the worms were crawling everywhere, homeless and perfectly desperate, on a small scale, like Secessia at home; that after awhile, they made cocoons out of hay, &c., and were drying up in them. He gave me some of these worms at home, and some without homes, and I will send you a sample of both. I found, upon examining the dried up ones, two very small white, or yellowish white wheat tadpoles to every dried up maggot, male and female—the farmer's hen-lice. This time the maggot changed to male and female wheat aphis—before the eggs hatched one which we see mated according to mythology—though my microscope ain't strong enough to see the worm's ribs, if it has any.

Now, Mr. Editor, are these a secession element, that can live and thrive on nothing, and sent up here to destroy our "staff of life?" I think here is a chance for some of us "stay at home guards" to make ourselves useful. The farmer is *backer* to all undertakings, though he may be despised by some because he will not turn his plow into a cannon. He is needed at home, and should be awake and doing. If any impediment appears to battle with, study well where to strike the surest blow, and then strike as none but the farmer can. I think we ought to be getting ready to do battle with some of the newly arrived, but troublesome guests.

No doubt the wheat tadpole is a relative of the sugar maple destroyer, the apple tree leaf destroyer, &c., and that their habits are not known, or the extent of their depredations. I think them of different species from Mr. Glover's Aphis, though they may belong to the secessia genera.

There is no doubt that the larva was in the straw or head on the Cushing farm, and carried into the barn there, and that it was carried in with all grain where the tadpole appeared, whether he did damage this season or not. That particular barn may give Mr. Cushing's cattle the pleuro, and his horses the glanders, or cribbing, or some other horrible disease—but it has brought out the tadpoles—as his farmer said—several months before their time. It is a perfect unventilated hot-house, and these mischievous pests, or any other, can breed and thrive there.

In most other barns the egg would have laid till spring or early summer, and then hatched out. Now, will anything but fire and sword exterminate them?

Let us think about it directly, and act. Don't appoint a Fast and wait while the Lord destroys them. Take hold right and strong

Wayland, Nov. 4, 1861. K.

For the New England Farmer.

IS FARMING PROFITABLE?---GARGET---BLIND STAGGERS.

MESSRS. EDITORS:—I have often noticed the following questions in your valuable paper:

1. Is farming profitable?
2. What will cure the disease in cows, called "garget?"
3. What will cure a swelled or tumefied bag, or udder?

The affirmative to the first question depends on three things; the price paid for the land—quality of soil tilled—and thirdly, *brains*, a very necessary accompaniment to secure success in *any* business.

I would call your attention to the following results, from the cultivation of 3¼ acres—a field no better than fifty other acres of my farm, the whole of which had previously been pastured for forty years.

In the spring of 1857, plowed and planted to potatoes (without manuring) 3¼ acres, and harvested a good, fair crop. In 1858, put on forty cart-loads barn-yard manure, planted to corn, and harvested good, fair crops. In 1859, same quantity manure, sowed broadcast three bushels of salt, planted corn, putting on a handful of ashes on each hill, and raised a large crop of corn. In 1860 sowed seven bushels of wheat, started to clover and herdsgrass, and took off the same fall seventy bushels of wheat, and three tons of good hay. I sold the wheat at $1 75 per bushel for seed. In 1861 I have taken off thirteen tons, by weight, of good hay. Has it not been profitable? Beat this who can. I cannot speak for any other farmer,

but *my* farm, farmed at the halves, pays me eight per cent.

The disease called "garget" commences in the horns and head. Besmear the top and back part of the head and around the roots of the horns, with warm tar and rub thoroughly; if it fails to effect a cure, report the failure, and it will be the *first* to my knowledge.

To cure swollen, or tumefied udders or bag, wash clean with warm soap-suds, then rub *thoroughly* with pure bee honey, and a cure will be effected in twenty-four hours generally; sometimes it may be necessary to repeat the operation. The above is the *very* best application for women suffering as above.

To cure the "blind staggers" in swine, make an incision about three inches long through the skin on the forehead; pull up the skin on each side, fill with fine salt, and the cure is effected immediately.

GEO. B. GREEN.

Windsor, Vt., Nov., 1861.

WEIGHTS AND MEASURES

OF VARIOUS FARM PRODUCTS AND OTHER THINGS, IN VARIOUS COUNTRIES.

In England and America grain is generally rated by the bushel, though it is not the same measure; for here we use the Winchester bushel, which contains 2,150 42-100 cubic inches. There, since 1862, the legal measure is called the imperial bushel, which contains 2,218 cubic inches; so that 32 of their bushels are about equal to 38 of ours.

The following are the commercial weights of a bushel of different articles, viz: Wheat, beans, potatoes and clover seed, 60 pounds. Corn, rye, flax seed and onions, 56 pounds. Corn on the cob weighs 70 pounds; buckwheat, 52; barley, 48; hemp seed, 44; Timothy seed, 45; castor beans, 46; oats, 35; bran, 20; blue grass seed, 14; salt, 50, according to one account, but Onondaga salt is 56, (the real weight of coarse salt is 85 pounds to the bushel;) dried apples, 24; dried peaches, 33, according to a table lately published in numerous papers, but according to our experience both are wrong. We have seen thousands of bushels sold at 22 pounds to the bushel, which will measure about three pecks.

Heaping Measures.—Potatoes, turnips, and esculent roots, apples and other fruits, meal, bran, and in some States oats, are sold by heaping measure, which contains 2,815 cubic inches.

Barrel Measure.—Rice, 600 pounds; flour, 196 lbs.; powder 25 lbs.; cider and other liquids, 30 gallons; corn, 5 bushels, shelled. By this latter measure crops are estimated, and corn bought and sold throughout most of the Southern and Western States. At New Orleans, a barrel of corn is a flour barrel full of ears. In some parts of the West it is common to count a hundred ears to a bushel.

Ton Weight and Ton Measure.—A ton of hay or any coarse bulky article usually sold by that measure, is twenty gross hundred: that is 2,240 pounds; though in many places that ridiculous old fashion is being done away and 2,000 pounds only counted to a ton.

A ton of timber, if round, consists of 40 cubic feet; if square, 54 feet. A ton of wine is 252 gallons.

A quarter of corn is the fourth of a ton, or eight imperial bushels. This is an English measure, not in use in this country, though very necessary to be known so as to understand agricultural reports.

Troy Weight and Avoirdupois Weight.—One hundred and forty-four pounds avoirdupois are equal to 175 pounds Troy—175 ounces Troy are equal to 192 ounces avoirdupois. All precious metals are bought and sold by Troy weight.

The kilogramme of France is 1,000 grammes, and equal to 2 pounds 2 ounces, 4 grains avoirdupois.

A chaldron of coal is 58⅔ cubic feet, generally estimated 36 bushels. A bushel of anthracite coal weighs 80 pounds, which makes the weight of a chaldron 2,880.

Weights of a Cubic Foot.—Of sand or loose earth, 95 pounds; compact soil, 124; a strong or clayey soil, 127; pure clay, 135; mixture of stones and clay, 160; masonry of stone, 205; brick, 125; cast iron, 450; steel, 489; copper 486; lead, 709; silver, 654; gold, 1,203; platina, 1,218; glass, 180; water, 62; tallow, 59; cork, 15; oak timber, 73; mahogany, 66; air, 0,0753. In the above, fractions are disregarded.

A bale of cotton, in Egypt, is 90 pounds; in America, a commercial bale is 400 pounds, but is put up in different States varying from 280 to 720 pounds. Sea Island cotton is put up in sacks of 300 pounds.

A bale of hay is 300 pounds.

A cord of wood is 128 solid feet, usually put 8 feet long, 4 feet wide and 4 high.

A perch of stone is 25 cubic feet, piled, or 22 in the wall.

Lime and sand to a perch of stone—three pecks of lime, and two-thirds of a one-horse cart load of sand.

Weight of Lime.—A bushel of limestone weighs 142 pounds; after it is burned, if weighed directly from the kiln, 75 pounds; showing that 67 pounds of carbonic acid and water have been driven off by fire. This bushel of lime will absorb 20 pounds of water, gradually applied during several days, and will then be in a state of dry powder, weighing 93 pounds; showing that 18 pounds of water have been converted into a solid, dry substance.

To Measure a Ton of Hay.—One hundred cubic feet of hay, in a solid mow or stack, will weigh a ton.

Compute Weight of Cattle by Measure.—Ascertain the girth back of the shoulders, and the length along the back, from the square of the buttock, to a point even with the point of the shoulder-blade; say the girth is 6 feet 4 inches, and the length 5 feet 3 inches, which multiplied together, gives 31 feet. Multiply this by 23, the number of pounds allowed to the foot, between 5 and 7 feet girth, and the result is 713 pounds, for the number of pounds of beef in the four quarters. Girths, from 7 to 9 feet, allow 31 pounds to the foot. Cattle must be fat and square built to hold out weight.

To Measure Grain in Bins, multiply the length and width together, and that product by the height in cubic inches and divide by 2,150, and you have the number of bushels.

To Measure Corn in the Ear, find the cubic inches as above, and divide by 2,815, the cubic inches in a heaped bushel, and take two-thirds of

the quotient for the number of bushels of shelled corn. This is upon the rule of giving three heaping half-bushels of ears to make a bushel of grain. Some falls short and some overruns this measure.

Board Measure.—Boards are sold by face measure. Multiply the width in inches by any number of pieces of equal length, by the inches of the length. Divide by 144, and the quotient is the number of feet, for any thickness under an inch. Every fourth-inch increase of thickness adds a fourth to the number of feet in the face measure.

Land Measure.—Every farmer should have a rod measure, a light, stiff pole, just 16½ feet long, for measuring land. By a little practice he can learn to step just a rod at five steps, which will answer very well for ordinary farm work. Ascertain the number of rods in width and length of any lot you wish to measure, and multiply one into the other and divide by 160, and you have the number of acres, as 160 square rods make a square acre. If you wish to lay off one acre square, measure 13 rods upon each side. This lacks one rod of being full measure.

Government Land Measure.—A township is six miles square, and contains 36 sections, 23,040 acres. A section, one mile square, 640. A quarter section, half a mile square, 160 acres. As this is 166 rods square, a strip one rod wide, or every rod in width, is an acre. A half-quarter section is half a mile long, north and south, almost universally, and a fourth of a mile wide, 80 acres. A quarter-quarter section is one-fourth of a mile square, 40 acres, and is the smallest sized tract, except fractions, ever sold by the government. The price is $1,25 an acre.

Measure of a Mile.—Our measure of distance is by the standard English mile, which is 5,280 feet in length, or 1,760 yards, or 320 rods. An English geographical mile is equal to 2,050 yards.

Scripture Measure.—"A Sabbath day's journey" is 1,155 yards—about two-thirds of a mile. A day's journey is 33½ miles. A reed is 10 feet 11½ inches. A palm is 3 inches. A fathom is 6 feet. A Greek foot is 12½ inches. A cubit is 2 feet. A great cubit is 11 feet.

As the superfices of all our States and counties are expressed in square miles, it should be borne in mind that the contents of a mile is 640 acres.

Number of Square Yards in an Acre.—English, 4,840; Scotch, 6,150; Irish, 7,840; Hamburg, 11,545; Amsterdam, 9,722; Dantzic, 6,650; France, (hectare,) 11,960; Prussia, (morgen,) 3,053.

Manure Measure.—This is generally estimated by the load, which is just about as definite as the phrase, "about as big as a piece of chalk." It ought to be measured by the cubic yard or cord. A cubic yard is 27 feet, each of which contain 1728 cubic inches. A cubic cord is 128 cubic feet. As the most of farmers have an idea in their minds of the size of a pile of wood containing a cord, they would readily compare that with the quantity of manure, if stated in cords. Every cart or wagon-box, before it leaves the maker's shop, ought to have the cubic feet and inches it will contain, indelibly marked upon it. This would enable the owner to calculate the amount of his load of grain, roots, earth, stone or manure.

Weight of Manure.—A solid foot of half rotted stable manure will weigh, upon an average, 56 pounds. If it is coarse or dry, it will average 48 pounds to the foot. A load of manure, or 36 cubic feet, of first quality, will weigh 2,016 pounds; second quality, 1,728 pounds. Weight to the acre—Eight loads of first kind, weighing 16,128 pounds, will give 108 pounds to each square rod, and less than 2½ pounds to each square foot. Five loads will give 63 pounds to the rod. An acre containing 43,560 square feet, the calculation of pounds per foot, of any quantity per acre, is easily made.—*The Plow.*

For the New England Farmer.

RETROSPECTIVE NOTES.

GYPSUM.—The attentive readers of this journal must have noticed an article with this heading which appeared, first in the weekly issue of Sept. 21st, and subsequently in the Nov. No. of the monthly edition. In it the reader is directed to sprinkle a small quantity of gypsum, more commonly known as plaster, or plaster of Paris, every morning, over his cattle stalls. And this direction is followed by the statement, that plaster is a good absorbent of ammonia, and consequently tends not only to economise a most valuable element of vegetable nutrition—namely, the ammonia—but also to sweeten and purify the air. These being the objects to be secured by the sprinkling of gypsum, readers who reflect upon what they read, and endeavor to make a *practical application* of every fact, truth and principle which may come under their cognizance, will hardly fail to come to this conclusion, namely, that if gypsum is of service in fixing or absorbing the ammonia in *cattle* stalls, and in purifying and sweetening the air of places where cattle are stabled, it must be much more serviceable to the stalls and stables of *horses*, as there is always much more ammonia developed from the urine and dung of horses than from those of cattle.

To be convinced of this fact, that there is a much larger amount of ammonia developed in horse-stables than in cattle-stables, one has only to compare his sensations when he first enters the one and the other, when first opened in the morning. On first entering a close, unventilated horse-stable, he will experience a disagreeable pungent smell in his nose, and more or less of a smarting sensation in his eyes, somewhat resembling that which is felt when a bottle of hartshorn or of smelling salts is opened in close proximity to the nasal and visual organs. On the other hand, when first entering in the morning a similarly close and unventilated stable for cows or cattle, very little, or none at all, of this pungency will be felt, even though the atmosphere may be quite disagreeable through the impurities derived from the exhalations arising from the lungs, the skin, and the excrements of the animals confined therein. This difference is owing to the much larger amount of ammoniacal vapors in the former case than in the latter.

It appears, then, that so far as the two objects, for which gypsum is directed to be used, are concerned, the horse-stable needs attending to still more than the cattle-stable. Ammonia is more largely and more speedily set free in the former than in the latter. So let us consider both, *as generally constructed and managed*, much in need of

having something done for them. For, certainly, something ought to be done when the creatures committed to man's care are shut up in stables so ill-constructed and managed that they are obliged to live and breathe in an atmosphere so foul and unwholesome as to injure seriously their health and constitutional vigor, and to render them much more liable to the attacks of disease. *Something ought to be done* when animals are shut up in an atmosphere which no man could breathe in for many whole nights in succession without an attack of disease in his lungs or elsewhere. Something ought to be done, too, when ammonia—the most valuable element in the farmer's manure—is taking to itself wings and flying away.

When a farmer to whom thinking is not, as it is to so many, a dread and difficulty, takes these things into consideration, the inquiry will naturally arise—

What ought to be Done to Improve our Stables in this Respect?—In a good many agricultural publications, as well as in Liebig's Agricultural Chemistry, Stockhardt's Chemical Field Lectures, Nash's Progressive Farmer, &c., he will find directions similar to those in the article now under notice, assuring him that sprinkling plaster in his stables will absorb the escaping ammonia, converting the volatile carbonate into a fixed or non-volatile sulphate of that valuable fertilizing element, and will also purify and sweeten the air. But doubts of this assertion cannot fail to arise in his mind when he reads in the same or other chemical authorities, that *dry* plaster cannot act upon ammonia; that it can produce the above results only in a state of solution, and, farther, that to dissolve plaster four hundred times its own weight of water must be added to it. He will see at once that if it requires four hundred pounds or pints of water to dissolve one pound of plaster, and thus reduce it to a state in which alone it can act on the ammonia escaping from his stables or his manure heap, but a very insignificant portion indeed of the plaster, which the authorities referred to have directed him to sprinkle in his stables or over his manure heap, can possibly accomplish anything towards the desired result. These doubts will be still farther strengthened when he finds, as he may, in some of the best agricultural journals, both in this country and in Great Britain, that others as well as himself have become skeptical as to the property usually ascribed to gypsum when merely sprinkled in the *dry* state upon the floor of a stable, or upon a manure heap. Several expressions of such doubts or skepticism have appeared, within a year or two, in the pages of the *Country Gentleman;* and positive denials of this asserted property of gypsum have appeared in other journals. For example, the *North British Agriculturist* about a year ago asserted that gypsum "is found in practice not to be a good fixer of ammonia in stables, byres (cow-houses,) &c." Again, a very good authority in matters connected with agricultural chemistry says, in the volume of the *Genesee Farmer* for 1857, after stating objections to the plans of fixing ammonia by the use of diluted sulphuric acid, and of a solution of copperas, that gypsum being cheap and easy of application, would be excellent for the purpose but for this one fact, viz., "Plaster, *unless in solution, will not* convert the carbonate of ammonia into a sulphate of ammonia. Scattering dry or moist plaster on the manure heap, then, is of little use." How Liebig came to make such a blunder is then explained, as also how naturally it has happened that one writer has copied it after another, until now it is to be found in almost every agricultural book and periodical in this country.

Now, if all these statements from respectable journals in Great Britain and in this country are to be received as authoritative, then chemists and farmers are once more "out at sea" in regard to the absorption of hartshorn or ammonia in stables and manure heaps. We are sorry that it is so, as the sprinkling of a little gypsum would be so easy and so cheap a method of preventing the escape and loss of thousands of dollars' worth of ammonia from every State in the Union. But if farmers have been trusting to a delusion, it is better that they should have it pointed out to them, than that they should continue any longer laboring under a mistake. For, when it becomes settled, established, and more widely known that gypsum sprinkled as usually directed, *will not* absorb the ammoniacal effluvia of stables and manure heaps, farmers and chemists will begin anew to make search for something that will certainly effect this object. And it is as a contribution to this reconsideration or reinvestigation of the question as to what is to be done to save the ammonia and to destroy or deodorize the foul air of our stables, that this article has been written. Copperas water or a solution of copperas is certainly a good deodorizer, but it is open to the objection that the presence of iron in manure will occasionally, if not always, be injurious.

Dry muck and sawdust are the most efficient absorbents of ammonia which we have tried in the stable; and we have seen the fumes of a manure heap speedily arrested by sprinkling on it half an ounce of strong sulphuric acid, diluted with a pailful of water. Who will tell us of a better way?

More Anon.

For the New England Farmer.

LUCERNE.

Mr. Editor:—I was pleased to see your article on Lucerne in your last number of the *Farmer*. I think its value to our farms has been overlooked. That it is a very valuable plant in many localities, admits not of a doubt. For soiling, I think it will be found the most useful plant that we can use. My experience with it is, however, limited. I bought a farm in Rhode Island, that had a few rods of lucerne, mixed in with other grasses, and had not a fair chance to grow to perfection. As it was, it would start up much earlier than other grass, and be ready for cutting, near three weeks sooner. When I broke up the field, I found it almost impossible to plow through it, the roots were so tough and strong. Most of the plants would draw through an eight-inch furrow, holding on so hard as in many cases to cause the plow to slide around them. I dug up a single root in the garden, that had been cultivated in a flower-bed, which weighed, after laying through a hot June day, on the flagstones the south side of the barn, over twenty-eight pounds. It was weighed by a neighbor, who thought it would have much exceeded thirty pounds previous to its being wilted. There were several hundred stalks, many of them over six feet in length. The root at the crown was near six inches

through, tapering down as large as a man's arm. It was cut off about two feet below the surface.

A gentleman at Adamsville, Little Compton, R. I., for a number of years cultivated lucerne, and cut it two and three times each season, according as the moisture might be. He used it as a hay crop, and thought it the best grass he could use. English writers give us very precise directions as to the best mode of preparing the soil for the seed, many of which are far too expensive for our adoption, and I think entirely useless. If the soil has been well worked and manured for previous crops, and the subsoil is not too hard, I think we need not fear but that it will grow, if not too wet a soil. No plant will stand a long drought better, as we have instances recorded where clover has died, and lucerne held out and made a good crop. Mr. Young tells us, the first use of this plant is that of soiling horses in the stable; for this purpose, no other article of food agrees so well with those animals; nothing better for oxen, cows, young cattle and even hogs in a farm-yard. He also thinks it well adapted to fattening beef.

Chili clover is, I think, well worth experimenting with by those who have the means of doing so. It is near allied to lucerne, and, in many respects, resembles it. It roots deep and strong, sends out an abundance of stalks, which, in a rich soil, will often grow to a wonderful length. Four years since, at the solicitation of a seed-dealer in New Bedford, I took off his hands some of this Chili clover seed, which I sowed on about one-third of an acre. It did not come up well, owing, I think, to its being damaged by the sea voyage. I plowed up the piece, but some of the plants by the side of the wall escaped, and have remained ever since. They grew rapidly and matured early, and could be cut two or three times in a season. I have no doubt it would be a good soiling, hay, or pasture crop. I have spoken of its stalks growing to a great length. I will here say that, in 1850, I furnished Commodore Jones with specimens of the wild oat of California, and also a clover plant which I think the same as the Chili clover. The stalks of this plant exceeded twelve feet. The Commodore forwarded them to the New York State Agricultural Society.

Rochester, Mass., Nov. 18, 1861. O. K.

KEEPING APPLES---NEW METHOD.

Mr. M. R. Thompson, of Mifflin county, Pennsylvania, in a letter to the *American Agriculturist*, describes his method of keeping choice apples, which appears to be worth noticing. He packs them in barrels or large boxes, surrounding each apple with common dry ground gypsum (plaster of Paris.) This is readily done thus: Put into the bottom of the barrel, or box, an inch of the plaster and then a layer of apples, keeping them from contact with each other, and an inch from the side all round. Sift in more plaster to fill up the spaces and cover the whole nearly an inch. Then add another layer of apples and more plaster, and so on to the top. The plaster employed is, we suppose, the common ground plaster for fertilizing—not the calcined used for making casts, models, etc. The former is cheap in most parts of the country, costing from $3 to $10 per tun. Of course the plaster is just as good for application to the field after being used during winter for packing apples. The plan is worthy of trial at least, for it would appear reasonable that the fruit thus surrounded with a compact mass of dry powder, should keep almost as well as if hermetically sealed. Mr. T. says he keeps pound pippins thus packed, in good order until the following June. We judge from a remark in his letter, that he does not store them in a cellar, but in any cool room of the dwelling or out-house. We are not certain whether the dry plaster would be a sufficient non-conductor to keep frost out, if exposed to severe cold—especially from the fruit near the outside of barrels.

For the New England Farmer.

SEED CORN.

Mr. Editor:—A few weeks since, at a meeting of the American Institute Farmers' Club, in New York city, they had a discussion upon seed corn. Much diversity of opinion prevailed, clearly showing that the subject was involved in much uncertainty, owing to the want of carefully conducted experiments, persistently followed up, for a succession of years, or at least long enough to positively settle the matter on a true basis. Some thought best to reject the small end of the ear alone; others would include the but, and plant only the middle; others reject the but, and use the balance; while some prefer the small end to any and all the rest of the ear. There seemed to be a general agreement that it is a good practice to select in the field the first ripened, well matured, two eared stalks, in order to have succeeding crops earlier, and increase the number of ears on a stalk. One man stated that he had known the selection of two or more ears on a stalk for seed to be persisted in until the result was that a yield of six and seven sound ears on one stalk was not unusual, but with a loss to the producer, in the diminished size of the ears.

These men, as a class, are probably some of our most extensive farmers, and above the average in intelligence, and possess superior advantages for observation, and yet we see what a conflict of views are entertained respecting a question of permanent importance to every corn grower in the country. It is more than probable that we have men in our farming communities who are capable, and have the means of carrying out experiments in this matter to satisfactory results. None need to suppose that it will be a money remunerating undertaking, but the reverse. A higher and more benevolent motive must prompt the act. Suppose the gain by reason of the proper settling of this question should be only three bushels of corn to the acre, (I think it will much exceed that,) it would add to the aggregate corn crop of the country millions of bushels. I have been inclined to the opinion that as the small end of the ear grew last, and was generally not so well filled as the but, that it did not mature so well, and consequently would not germinate so vigorous a plant, nor produce so abundant a crop. Of one thing I am quite sure, viz., that by selecting the first ripened two eared stalks for seed, the succeeding crops will be earlier and larger in yield. I hope this subject will be thoroughly investigated, and the true practice established so decidedly that none can doubt or cavil about the matter. O. K.

Rochester, Mass., 1861.

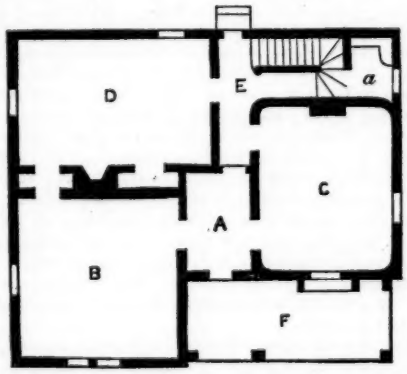
RURAL ARCHITECTURE.

DESIGN FOR A COUNTRY RESIDENCE, BY GEO. E. HARNEY, LYNN, MASS.

DESIGNED AND ENGRAVED EXPRESSLY FOR THE NEW ENGLAND FARMER.

In continuation of our series of hints for Rural Improvements, we offer at this time a design and plan for a suburban cottage of moderate size and cost. It measures thirty-one by thirty-six feet on the ground, and is one and a half stories high, with square rooms below, and good airy chambers, well ventilated, on the second floor.

Plan.—The front door—the upper half of which is glazed—opens into a vestibule, A, six feet wide,



and nine feet long. From the rear of this a passage extends to the staircase hall, F, which opens out to the yard, or into a wood-shed, if desired. B, the parlor, is fifteen feet square, and is well lighted by a mullioned window in front, and a single window at the sides. It connects by means of a small passage with the living-room, D, (this passage might be converted into a closet—thereby entirely separating the parlor from the living-room.) This living-room is twelve by seventeen, and opens into the staircase hall at a point convenient to the back entrance to the house. Across the hall, and near the head of the cellar stairs, is a good sized closet or store-room, *a*, fitted up with shelves and cupboards, and lighted by a single window. (Owing to a mistake in drawing, the perspective view shows only one window on this side of the house, instead of *two*, as there should be—see plan.)

The sitting-room, C, measures thirteen by fifteen, and has two doors, one opening into the vestibule, and the other into the passage back of it.

The second floor is divided mainly like the first, and comprises three chambers, a bathing-room, and five closets—besides the hall. The chamber over the parlor is lighted by a dormer window at the side, and a mullioned window in the front, with swing sashes opening out upon a pleasant balcony shown in the perspective.

Interior Finish, &c.—The finish of the interior

of this dwelling is to be in the plain, simple cottage style, with no attempt at ornamentation, by means of intricate detail work. The stock should be of good No. 2 pine throughout. The finish of the windows and doors is to be a plain architrave, with a simple cap moulding above. The base in the parlor, sitting-room and hall, is to be nine inches high, with a simple moulding above—and in the other rooms, eight inches high, beveled on top.

The parlor chimney-piece may be a marble slab, supported on neat bronze brackets—and in the other rooms, the mantles may be of wood. The walls are to be lathed and plastered, and finished for papering.

All the standing finish throughout the house is to be oiled and varnished. The kitchen floor, sink, &c., closet and bathing-room floors and closet-shelves, should have two coats of lead and oil paint of suitable colors.

Exterior.—The exterior of this house, as will be seen by the perspective view, has some ornamental features, which, though not absolutely necessary, add to the convenience, and we think heighten the artistic effect of the design. Thus—the balcony—while it affords a pleasant retreat for the occupant of the chamber to which it is attached—serves also as a hood, shielding the parlor windows from the sun; and the veranda shelters the front entrance to the house, and fills up what would otherwise be a blank, cheerless space, combining use with ornament. Then, too, the widely-projecting eaves—the heavy brackets—the dormer windows and truncated gables, are all simple methods of giving character to the design, and, in order to produce proper effects, care should be taken that these ornamental details be executed in a substantial manner, of heavy stock, and not of the useless inch board stuff, which commonly finds its way into such places, to the great discredit of the builders.

The outside of this house should then be painted with at least two different tints of lead and oil paint, the color of the trimmings being a few shades darker than the main body, unless the main body be quite dark—in which case the trimmings should be lighter, the object being to obtain a contrast between the two. For this house, we would recommend a fawn or a light freestone color for the vertical boarding, and a darker tint like that of the common brown freestone for the trimmings. The window-sashes should be drawn bronze green, and the outside doors grained and varnished.

The cellar is seven feet six inches high in the clear, the principal floor is ten feet in height, and the attics are also ten feet in the centre, and five at the eaves, the posts being sixteen feet long.

The walls are to be covered with vertical boarding and heavy battens, and the roof with cedar shingles.

Cost.—Built in the above manner, and finished throughout, this cottage would cost from $1500 to $1700.

For the New England Farmer.

A NEW ERA FOR CHILDREN---THE PROSPECT BRIGHTENING.

MY DEAR SIR:—Something over twenty years ago I wrote a series of articles for the old *New England Farmer*, on the advantages of a knowledge of the natural sciences to farmers. The time that has elapsed since then, and the experiences I have met, have only served to impress the facts I then attempted to utter, more strongly upon my mind. Many others have viewed the matter as I have done, but how to bring the thing about, so that young farmers could obtain a knowledge of these sciences, has been the question. Some have proposed agricultural colleges, with learned professors, as the best means of accomplishing the end. In a few States, such colleges have been established, and I am happy to believe they are meeting with gratifying success.

But colleges cannot meet the wants of every one. There always have been, and always will be, a great many boys in the country, whose capacities are bright, and whose desires of knowledge are equal, and often superior, to those in more favored circumstances, to whom the doors of the great colleges are closed. They cannot afford the time, or the means of obtaining education there. Then there are the girls; the black-eyed and the blue-eyed, laughing girls. They are as fond of knowledge as the boys, and their capacities are as bright, and their application in the pursuit of instruction are often greater than that of the more daring sex.

It was a noble act in the formation of our government that established the common school system of education, a system that, to a great extent, is capable of supplying the necessities of so large a portion of our population, who, without them, would be very limited in their means of acquiring knowledge.

It is one of the pleasing features of this age of progress, the improvements that are being made in every department of those institutions which have appropriately been denominated "the people's colleges." We are having better school-houses, spacious, comfortable rooms, well ventilated, well warmed in winter, with beautiful yards attached, in the places of the little, cramped up, smoky, dark, dingy rooms, located on the corner, so near the public way, as to cause the traveller to become a nuisance to the school, and too often the school a nuisance to the traveller. We are having teachers educated to their business, in the place of those who formerly taught a few winters, or a few summers, just to make the most of time in portions of their lives when this employment could be followed without injury to the main business of future years, and instead of the frequent changes once so often made in teachers, in our best schools, the best are obtained and retained in their position as long as possible.

How few of our readers can follow the memory back to the days when Webster's old Spelling-Book, the American Preceptor, or "the Third Part," Morse's old Geography, with two maps, one of the World, and one of North America, Webster's

or Murray's Grammar, and Pike's Arithmetic, constituted the encyclopædia of common school literature. These were all good books in their day, and very many good scholars gained good educations in the several branches upon which they treated, by the hard study that opened their mysteries. But what a contrast they afforded to the school-books of the present time! I have often thought that I would like to have the scholars of 1861 see the books used at the commencement of the present century, a few of which, treasured by careful hands, have fallen to my possession.

Great as this improvement has been, the ball is still rolling on, and I hope it will continue to roll until a higher degree of excellence is attained than the public has yet anticipated, though I must admit that an advancement in the matter of reading-books has recently been made by Marcius Wilson, and published by Messrs. Harper, of New York, entitled the "School and Family Readers." A great excellency of the more advanced of these readers, is, that in the place of much of the matter usually introduced into reading-books, of which the scholar learns little, and cares less, they are interspersed with subjects of natural history, much of which comes with the every day's observations of the pupil, and will be of benefit and interest all the way through life. For instance, the science of Human Physiology, has a place, written in an every-day, familiar style, and copiously illustrated. So of Vegetable Physiology, and Botany, Ornithology, Entomology, Ichthyology, or the science of fishes, Geology, Philosophy, Physical Geography, &c., all familiarly treated, and beautifully illustrated.

This work strikes me favorably, from the fact, that while the scholar is learning to read, he is at the same time becoming acquainted with his own organization, and the natural productions of the world in which he dwells, many of which are formed for his benefit. Some of them are annoyances, and all worthy of his careful study and attention.

I wish the work a general introduction into our schools and families, from a confident expectation that it will introduce a new and beautiful feature in our educational system, and one of great interest and practical utility to the student.

In addition to the above series of reading-books, our young friends are blessed in the publication of another volume by Messrs. Swan, Brewer & Tileston, of Boston, entitled, "Manual of Agriculture," a work got up expressly as a text-book for common schools. It was a much needed work, and its use in schools and families cannot fail to introduce a beginning of agricultural knowledge and agricultural improvement in a new and hopeful field, the minds of children and youth. I anticipate much good from this work. In commendation of it, it is only necessary to say it was prepared by GEORGE B. EMERSON and CHARLES L. FLINT, names that carry evidence in themselves that the book is a good one.

I should certainly rejoice to see all the above works introduced into all of our New England schools. They are already in some of them. But if any school neglects to get them, I say to parents in such districts, you cannot give your children a better holiday present, than the Manual of Agriculture, or a copy of Harper's School and Family Readers.

W. BACON.

Richmond, Nov., 1861.

OYSTER SHELL LIME.

Not being able to dress our lands last spring as we desired to do, just before the second hoeing time we procured a quantity of *oyster shell lime* of Mr. JAMES GOULD, of this city. It did not arrive in season to be applied before the crop was hoed, but was added after the hoeing had been completed. It was then applied to part of a field of potatoes, at the rate of a handful to the hill,—that is, as much as a man could grasp,—and scattered in among the tops. The potatoes were all on the same quality of land, and nearly on the same level. We passed through the field many times during the growing season, but observed no difference in the appearance of the tops, and rather came to the conclusion that the application of the lime had exerted little or no influence upon the crop. Returning home, one evening, we found a cart-load of potatoes at the bulkhead which were as even in size and as fair and beautiful in appearance as any we ever saw. The potatoes were of the variety called the "Riley," or "Dover," or what are well known by the Irish people as the "*Irish Cup*,"—so called because the eyes are so deeply indented.

"Well, Darby," said we to the man who had dug them, "that is a very fine load."

"Yes, sir," he replied, "you never have seen better."

"Was there any difference in the crop between the limed and unlimed?"

"Yes, as many again where the lime was put."

"As many again in number, or in pounds, do you mean?"

"There are twice as many pounds where the lime is."

Beside the size and fairness of the potatoes, they are exceedingly fine flavored, though we believe that is generally the case with the potato crop this year. If we plant potatoes again, we shall resort to the lime. We shall spread from five to twenty bushels per acre over our old pastures, mowing lots, and about fruit trees. From some inquiries and investigations made, we have come to the conclusion that well prepared oyster shell lime is more valuable for our lands, than stone lime.

HOVEN IN CATTLE.—This disease is usually brought on by cattle being removed from confinement and winter feeding to the luxuriance of the clover field. In the article on *Veterinary Science* in the new *Encyclopædia Britannica*, the oils of linseed and turpentine are stated to be nearly a specific. For a large animal take linseed oil raw, one pound; oil of turpentine, from two to three ounces; laudanum from one to two ounces—and after mixing, administer the whole at a dose.

ACKNOWLEDGMENTS. — Thanks to "O. K.," Rochester, for his valuable articles and good will.

We would say to those who read the articles over the signature "O. K.," that he is a practical farmer, and only writes of things upon which he is informed, unless it be in the form of inquiry.

For the New England Farmer.

IS THERE ANY SUBSTITUTE FOR THE PLOW?

FRIEND BROWN:—I find the following paragraph in the *American Agriculturist*, (a valuable paper, by the by.)

"Since the benefits of deep tillage and thorough pulverization of the soil have been recognized, it has become apparent that some new implement is needed in place of the plow. With the latter it is impracticable to reach the required depth without great expenditure of animal power, and the work of pulverization is imperfectly performed. . . . An implement is needed, to work by horse or ox power, that shall at one operation invert the surface growth, stir the soil deeply, and not make the subsoil still more dense. The invention of a successful apparatus of this kind will bring a large fortune to somebody."

Yes, I believe the fortune is a sure thing to whosoever will bring out an apparatus of this kind. But is it within the reach of possibility, is the question with me. That it is a felt necessity, none will gainsay. All admit, to greater or less extent, the evils alleged against the plow as now constructed, but all the suggestions made to obviate them, by substituting other methods, except spading and trenching, seem utterly impracticable for general use, while spading and trenching are so very expensive, that they can be adopted only to a very limited extent. A plow with pulverizing apparatus attached, was described recently, before the "American Institute Farmers' Club," which was commended by some, and regarded as utterly worthless by others. It roots up the soil and digs it to pieces, leaving much of the sod upon the surface, exposed to waste, and in a wet time to grow and be troublesome to extirpate. Let us look at some of the evils alleged against the plow. I may not enumerate them all, but some of the most prominent. The first and foremost is the pressure of the sole of the plow upon the bottom of the furrows; another, the treading of the team in the same, and the lifting of the furrow slice in order to turn it over properly, and again, the great amount of power requisite to draw the plow.

According to some, each time the plow passes over a field, it increases the compactness of the subsoil, and diminishes the chances for a good crop. This position I am not willing to admit. If the sod is brought upon the surface, I care not how many times my fields are plowed previous to being planted with almost all farm crops. I do not believe the pressure of the plow, or the foot of the team, in the bottom of the furrow, so great an evil, as not to be very much counterbalanced by the increased advantage of the more perfect disintegration and mixture of the soil by repeated plowing.

As to the objection urged, that the weight of the furrow upon the mould board adds very much to the draught, I do not think much of it, for the reason that I suppose it not so great as generally thought, upon a well constructed plow. I think we are not to believe the pressure of the furrow-slice upon the plow, anything like the *weight* of the same upon the scale. I think, according as the team moves slow fast or, the weight is increased or diminished. The fast team gives the sod or soil a momentum that greatly relieves the plow of its dead weight. The objection urged against the plow, that it requires great power of draught, I look upon as groundless, considering the work it performs. The simple fact, that every and all substitutes I have ever heard or seen described, require far more power to operate them than the plow, and at the same time not doing the required work enough better to supersede it, is conclusive evidence that for the quality of its work and power necessary to do it, it has not, and probably will not have very soon, a successful competitor.

That some substitute will eventually be found for the plow, is within the range of possibility, but I doubt whether, with the same amount of power, it will accomplish better results. If we wish to do more than our plows now accomplish, I think it must be at the expense of greater power. The plow will undoubtedly undergo improvements in the future, probably in not so great a ratio, but quite obvious. We have in our improved subsoil plows a remedy for the packing of the bottom of the furrow by the plow and team. On some soils, it is as really necessary to be used as the plow. Suppose we take the double, or Michigan plow, and follow it with a subsoil plow, what better is it possible to do, unless we resort to the spade, or trenching?

It is far from my intention to discourage the invention of superior implements to those we now have, but let us not overlook their merits in some wild goose chase after a substitute. O. K.

Rochester, Mass., 1861.

SINGULAR FACTS IN HUMAN LIFE.—The average length of human life is about 28 years. One-quarter die previous to the age of 7; one-hal before reaching 17. Only one of every 1000 persons reaches 100 years. Only six of every 100 reaches the age of 65, and not more than one in 500 lives to 80 years of age. Of the whole population on the globe, it is estimated that 90,000 die every day; about 3700 every hour, and sixty every minute, or one every second. These losses are more than counterbalanced by the number of births. The married are longer lived than the single. The average duration of life in all civilized countries is greater now than in any anterior period. Macaulay, the distinguished historian, states that in the year 1685—not an unhealthy year—the deaths in England were as one to 20, but in 1850 one to 40. Dupni, a well known French writer, states that the average duration of life in France from 1776 to 1843 increased 52 days annually. The rate of mortality in 1781 was one in 29, but in 1850 one in 40. The rich men live on an average 42 years, but the poor only 30 years. —*Free Nation.*

WORDS are nice things, but they strike hard. We wield them so easily that we are apt to forget their hidden power. Fitly spoken, they fall like the sunshine, the dew, and the summer rain—but when unfitly, like the frost, the hail, and the desolating tempest.

For the New England Farmer.

CHARACTER IS CAPITAL---LET US PLAY THE MAN.

"Are you acquainted with the H—— brothers?" asked an old provision dealer of me, in Boston, awhile since.

"Very well so," answered I; "their farm is located within a couple of miles of my place, and I often call there."

"Well, what sort of men are they?" said he.

"Two hard working, thrifty farmers, and honest, reliable men."

"Well, that is just my experience," exclaimed the old man, with warmth; "and I have traded with them for many years; when I engage a lot of potatoes, or cabbages, or turnips, I don't have to worry myself about being here when they are delivered; I *know* I shall find everything all right. Then there is A., a neighbor of theirs; he's just like them; one of the honest and honorable men that I like to trade with; but it aint so with Z.; I have to look out for him; the measure is too short, or things don't come up to what's promised. I most always have some trouble with him."

So it is, in the long run, other things equal, the honest man is the successful man. When the market is but scantily supplied, the difference between the sharper and honest dealer may not be so distinctly drawn; but let the market be hard, the distinction is soon made evident. A smooth tongue may prove a power, when brought to bear on transient, floating customers; but that permanent patronage, which subtracts so much from the hardships of marketing, can be won by those only whose goods are as good as their promises. But were there no pecuniary motives to prompt to honest dealing, there would still remain a man's manhood to be respected—a precious heritage, worth more than was ever brought forth by the sweat of the brow—the immortal right to be maintained, though the pocket book may seem to suffer.

The practice of putting the best of the potatoes on the top of the barrel, ("deaconing," is the slang term for this,) and the best of the load on the top of the wagon, is a curious illustration of cunning overreaching itself; the practice, if I am correctly informed, having now become universal, being required on the part of the purchaser, and consequently anticipated by the farmer.

But the genus sharper is common to both producer and dealer. There are men in the provision trade in the markets of Boston, men who do business on a large scale, too, who hold their promises very lightly if a dollar is to be made by the breaking of it. Many an honest farmer has been taught his lesson of the standard of manliness on the part of such, by some such experience as this:

"I have brought that load of onions for you."

"What onions?" exclaims the dealer, with well affected surprise.

"The onions that Mr. B., of your firm, spoke for yesterday."

"Mr. B. had no business to speak for the onions," replies the dealer; "we don't want them."

After a little sharp experience of this kind, our farmer perceives that whenever the article has fallen in the market, between the time it was ordered and the time appointed for delivery, Mr. A. will be very apt to declare, with well assured passion, that Mr. B. had no right to order the article; it was not wanted; or vice versa, Mr. B. will in like manner declare that Mr. A. had no right to order the article; it was not wanted. It is better to keep our manhood, though there be but fourpence in the wallet, than store tens of thousands in the vault, by such rascality.

There are noble farmers I wot of, who have laid down and observed a rule for themselves in relation to such sharpers, that I would that all might follow, to the end that the genus might be extinguished; viz., never after to deal with such, no matter what inducements they might hold out. They might thus be taught that *character* is capital.

The practice by some of bringing out barrels of extraordinary capacity to receive onions, potatoes, or other products purchased by the barrel, I need not say is a mean, unmanly act. I honestly advise men who intend going through life on such a basis of action to hang or drown themselves, or in some way stop the record just where it is.

The effect of such dealing on the relation between producer and dealer is most unfortunate. It produces a want of healthy respect and a mutual distrust, to the disadvantage of each party concerned. In the long run, neither party gain by it, pecuniarily, and I doubt not retire from business pretty well satisfied, that after all, such dealing is no proof of any great amount of either sharpness or shrewdness.

JAMES J. H. GREGORY.

Marblehead, Mass., 1861.

For the New England Farmer.

THE WHOLE THING IN A NUT-SHELL.

MR. EDITOR:—In your comments—in a notice of the Transactions of the Massachusetts Society for the Promotion of Agriculture—in the *New England Farmer* of Nov. 24, you "hit the nail on the head," and state the question just as it is—whether farming is profitable or not, and to my mind, the statement carries its own answer. It is *not*, whether this or that one makes money at the business of farming; but how is it on the whole, in the aggregate, as a class, comparing them with the same number in any other profession you please. If, as a class, the farmer does not enjoy better health—no small item in making up the balance sheet of human enjoyment—have more, or as many of the substantial comforts of life, works no harder, comparing muscle with mind, and its results as to wear and tear of the body, and, above all, is the most independent being which treads the ground he tills, or that walks on God's earth; and, lastly, if, as a class, they do not probate as much property as any other, then, I confess, farming does not pay, and men do well in seeking other employments, to secure happiness and property.

No man with any observation can justly question the above; they are the farmers *de facto*, whatever may be said to the contrary. Look at the "out of debt" farmer during the year 1861, thus far, and compare him with the other classes of the community. See how he stands out "head and shoulders", like an oasis in a burning desert, ahead and above all others in financial solidity. Surely he is the salt of the earth; his business the basis of all wealth and prosperity, as well as hu-

man enjoyment. This is no fiction, but eternal truth. The true farmer is like pure old brass, the more you rub him, the brighter he shines. The fruits of his business, like the bright, morning sun, cheers and comforts all. His, indeed, is a noble calling, fit for him who was made in the image of God.

Young man, don't be in haste to leave the old farm, with its cares and labors, to the "old folks," until you are well convinced, the world has something more noble and glorious for you. Rest assured, if you do, that in the sad hours which will come over you, its inmates and shadows will haunt you, while the aged folks at home will sigh and lament that no son is near to cheer them on, as the years come over them, and to lighten the labors of the good old farm. Young man, stay at home with the "old folks," and the farm is yours.

King Oak Hill, 1861. N. Q. T.

DO YOU BRUISE YOUR OATS YET?

The London Omnibus Company have lately made a report on feeding horses, which discloses some interesting information not only to farmers, but to every owner of a horse. As a great number of horses are now used in the army for cavalry, artillery and draught purposes, the facts stated are of great value at the present time. The London Company uses no less than 6000 horses. 3000 of this number had for their feed bruised oats and hay. The allowance accorded to the first, was bruised oats, 16 lbs.; cut hay, 7½ lbs.; cut straw, 2½ lbs. The allowance accorded to the second, unbruised oats, 19 lbs.; uncut hay, 13 lbs. The bruised oats, cut hay and cut straw amounted to 26 lbs.; and the unbruised oats, &c., to 32 lbs. The horse which had bruised oats, with cut hay and straw, and consumed 26 lbs. per day, could do the same work as well, and was kept in as good condition as the horse which received 32 lbs. per day. Here was a saving of 6 lbs. per day on the feeding of each horse receiving bruised oats, cut hay and cut straw. The advantage of bruised oats and cut hay over unbruised oats and uncut hay is estimated at 2½d. per day on each horse, amounting to upwards of £60 per day for the company's 6000 horses. It is by no means an unimportant result with which this experiment has supplied us. To the farmer who expends a large sum in the support of horse-power, there are two points this experiment clearly establishes, which, in practice, must be profitable—first, the saving of food to the amount of 6 lbs. per day; and, second, no loss of horse-power arising from that saving.

THE CROP OF MAPLE SUGAR.—Hunt's *Merchant's Magazine* estimates the crop of maple sugar for the current year at 28,000 tons. The trees are tapped in February to obtain the product, and the process is usually completed by the end of March. An intelligent judgment may, therefore, be fairly formed at this date of the aggregate yield by the aid of careful comparison with the ascertained products of former years, and accurate observers generally concur in the opinion that the foregoing is a moderate estimate, viz.: 28,000 tons, or 62,720,000 pounds. Maple sugar may be fairly quoted at eight cents per pound. The aggregate of this current crop is hence $5,017,600.

EXTRACTS AND REPLIES.

POULTRY.

Please publish the enclosed statement as the result of my experience in keeping fowls, for one year, commencing Nov. 15th, 1860, and ending Nov. 15th, 1861.

I commenced Nov. 15, 1860, with 35 fowls, valued at	$17,50
Cost of grain and other feed	67,73
	$85,23
Have sold 127 chicken for	57,30
" " 12 fowls for	5,75
" " 446 11-12 dozen eggs, for	97,51
	$160,56
Have 84 fowls on hand, at 50c	42,00
	$202,56
Deduct the cost	85,23
Nett profit for one year	$117,33
Number of dozen of eggs laid in one year	443¼
Number of chickens hatched	191
" " lost	3
" " raised	188

WILLIAM ROBINSON.

Watertown, Nov. 15, 1861.

SICK HENS.

Your correspondent from Marblehead says he has several sick hens, and asks, "What is the name of it? Is it contagious? What is the remedy?" In answer to number one, I would say it is what is called in the books on fowls, the roup. Second, Is it contagious? Yes, it would affect a thousand fowls, if he had as many. What is the remedy for it? Charcoal. Remove the sick ones from the other fowls as soon as they show any symptoms of hard breathing, the first indication of the disease, and feed with a little finely powdered charcoal mixed with Indian meal; give plenty of fresh water, and keep the fowls warm; white-wash your coop, and spread around in it chloride of lime. If his fowls are badly diseased, it is cheaper for him to cut their heads off, and begin with a fresh lot. That has been my experience. C. E.

Malden, Nov., 1861.

TRANSACTIONS OF THE ESSEX COUNTY AGRICULTURAL SOCIETY.

I learn that 120 pages of this annual are already printed, and that the Essays and Reports which have been approved, will probably make 40 or 50 pages more. I have long been of the opinion that this Society has done more to advance the cause for which it is organized, by its annual publication, than in any other manner. I have these publications bound in decades, from 1818 onwards, and value them as highly as any book in my library. Like the farmer in his frock and trowsers, they give instruction in the natural way. The impulse given to this Society by Timothy Pickering and Henry Colman, will long be remembered, as among their most creditable labors. They were men of original thought and determined action—none of your *kid-glove gentry*. P.

November, 1861.

COVERING FOR HAY STACKS, ETC.

The "Rubber Clothing Company," No. 37 Milk Street, Boston, make a tarpaulin, or stout drill, coated with rubber. This will keep stacks of hay,

oats, or any other grain, perfectly dry for any length of time. The tarpaulin will last for ten years, with ordinary care. They cost $1 per square yard, and are made of any size.

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HOW TO FEED A COLT.

A reader of the *Farmer* wants to know how to grow a two-years old colt to its utmost size. I have a three-years old colt, of the Black Hawk breed, that weighed at 37 months old 1025 pounds. He is said by good judges to be a good model of the original Black Hawk, formerly owned by David Hill, of Bridport, Vt., both in form and action, except the colt is about 75 pounds the largest. The feed I gave him last winter was as follows:—all the hay he would eat, (which was of the best Timothy and red clover,) four quarts of boiled potatoes, together with from one to two quarts of oat meal per day, and all the salt he would eat. I keep him in a box stall, without a floor. His color is a perfect black, except one white foot and a white spot in the forehead; is well broke to harness, is perfectly kind, and it would do any man, woman or child good to get into the sleigh or buggy and ride after him one mile, for it would give their blood a good circulation. A. B. COLLINS.

West Dover, Vt., Nov., 1861.

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FINE HORSES.

I have a Bullrush Morgan mare, one year and five months old, that weighs 923 pounds. I think this is hard to beat. I have also a horse colt of the same age, that weighs 773 pounds, sired by the Green Mountain Morgan. If any one can beat these, I would like to see the figures. These colts have not had any extra care, except they were kept in a warm stall last winter. S. D.

Bolton, Jonesville P. O., Vermont.

PREPARATION OF BONES FOR USE.

EDS. COUNTRY GENTLEMAN:—In your paper of Nov. 14, you ask for a practical and inexpensive method of preparing bones for use. I will give you my way, which is so simple that, although I have practiced it for years, I should not have thought of parading it in your columns, but for your inquiry, and also because our friend HOWARD, of the *Cultivator*, who notices and remembers everything practical and useful, commended it in his last week's paper. I set an old cask, with one head, in some convenient spot back of the house, in the spring, and of the bones which have accumulated through the winter, I throw in enough to cover the bottom; then enough of unleached ashes thoroughly to cover them; then another layer of bones, then ashes, and so in alternate layers until the cask is full. On top is placed a sufficient covering of ashes, loam or charcoal dust, to prevent the escape of any gas. I usually wet down the ashes as I proceed, and leave the cask exposed to the weather, that they may be kept damp. By the next spring, when I wish to use them, the bones are thoroughly digested, and in a fit condition to use.

By this management I preserve all the material of the bones, and it stands to reason that they must be more valuable than those from which the animal matter has been extracated by the soap boilers, and which are then burnt for the sugar refineries, and then made into superphosphate.

I usually take the mixed bones and ashes, and compost with well rotted manure, a liberal sprinkling of plaster, a little guano and salt, and a load of sweepings from the blacksmith shop, of iron scales, charcoal dust, horse hoof parings and the manure made there. This I apply to trees, especially pears.

The growth caused by this is astonishing; as you perceive, this compost contains all the requirements, both for growth and fruit, better than any purchased superphosphate, for it has the potash so essential to the pear, and the iron, which is very important. I also prepared my grape border with this.

I not only use the bones saved from our own family, but buy a good many, paying Irish and German boys for collecting, about half a cent per pound, which is the market price obtained by the cutlery works for their refuse bones.

I have great faith in the efficacy of both ashes and bones, and I think this combination of them is both cheap and useful.—JAMES S. GRENNELL, *in Country Gentleman.*

UNDERDRAINING.

We have received from Messrs. C. M. Saxton, Barker & Co., 25 Park Row, New York city, a highly valuable work entitled "Farm Drainage," by Henry F. French, Esq., of Exeter, N. H. We rejoice to have this opportunity of calling the attention of agriculturists in this vicinity to this important book—satisfied that no farmer can carefully read its clearly written pages without obtaining the choicest rules upon this important subject. We illustrate: Three years since an intelligent young farmer in Huntington, Ct., who had been carefully and thoughtfully examining this subject, purchased for a song six acres of "worthless swamp" in that town. There grew upon it occasional blades, thinly distributed, of wide, coarse, swamp grass; a few bunches of willow and alder bushes a foot or two high, struggling in the midst of the foul and stagnant water for an existence; the long water moss, skeleton-like in its proportions, a fitting emblem of death, and hosts of revelling bull-frogs. Thus had this unsightly swamp been, back beyond the memory of man, and thus did it remain up to the time we narrate. Well, the swamp was purchased at a song—the practical old farmers in the vicinity laughed and sneered at the fanaticism of this young enthusiast, but he persevered, surveyed and underdrained the six acres at an expense of $150. The water left his land, so did the swamp grass and moss, ditto hoarse-voiced frogs, and the bushes he pulled up by the roots. He then sowed grass seed over the entire solid surface, and the past summer sold the six acres for $117 per acre, and the crop now averages three tons per acre. This is only one case out of thousands where underdraining has been wonderfully successful and increased the value of the land more than five hundred per cent. We assure one and all of our readers who are interested in the soil, that $1,00 cannot be appropriated to a better use than by the purchase of this excellent book on drainage, and we tender our thanks to the gentlemanly publishers for the opportunity they have given us to examine its pages.—*Newark Evening Journal.*

AN HOUR IN A PEAR ORCHARD.

We recently had had the pleasure of visiting the Pear orchard of W. BACON, Esq., of Roxbury, and of fully realizing some of the marvellous stories we have heard, of pear raising, in relation to both trees and fruit. Mr. Bacon was accustomed to the farm in his youth, and cultivated there his natural taste for rural pursuits. He has "an eye for trees," as others have for paintings, or fine animals, or beautiful landscapes, and knows their names and peculiar habits, as a parent does those of his children. But that "Divinity that shapes our ends," called him away from the profession which he loved, and placed him in a dry goods store, where *forty* years of devotion could not obliterate his early tastes. Galloons and laces, muslins, and Thibets, and collars might bring profits to his till, but never could satisfy his desire for the swelling buds, fragrant blossoms and graceful branches of favorite trees. So at the end of more than sixty years, he snatched an hour now and then from the counter, raised a piece of land a yard wide, from the salt marsh, dressed it, planted his trees, fashioned their limbs to gratify his critical eye, and now, one among them stands the handsomest Dix pear we ever saw! Six or eight other trees comprised his first effort. They were planted directly behind his store, which stands on the main street in the city of Roxbury, and were placed upon a sort of terrace which he threw up from the marsh, and which answered the double purpose of a dike to keep out the returning tides, as well as a bed for the roots of his favorite trees. These eight or nine trees are now each about eight inches through, and pay the interest of more money than we dare state in this notice.

At length the old love got the mastery; the store and all its interests were abandoned to his sons, and he went forth into the cheerful light to indulge his early tastes, and grow young again. He now entered upon his plans with avidity, by making ditches through the marsh, and diking out the salt water that returned with the flood tides. Where paths were to be made, the earth was thrown out to the depth of three feet and its place supplied with oyster shells. Over this earth was thrown street sweepings, old mortar, ashes, and all similar rubbish that he could obtain. To this was added large quantities of *tan bark*, and to this, mainly, he imputes the wonderful success he has had in producing his almost unrivalled crops of pears! Not that the trees find in this the principal aliment they require, but that it forms a soft, moist and porous root bed, where the roots can range without obstruction in search of other and richer substances which he applies to the soil. The land is so thoroughly drained, and so open and light, that a fortnight's rain, he says, makes no difference in its appearance.

The piece of land we went over is something less, we should think, than one acre. On this he has *six hundred* standard pear trees; that is, trees set in place and not to be removed, though most of them are on quince stocks,—beside large numbers of young trees which are for sale, and plum and peach trees, currants, gooseberries, raspberries, flowers and ornamental shrubs. Between these he manages to raise his potatoes and such other garden stuff as he needs for his table.

Passing a tree, Mr. B. remarked that it produced four bushels of pears this season, which he sold for *forty-eight* dollars! Another near it a little less, and a Beurre Diel, three years ago, gave him the neat sum of *eighty-two* dollars for a single crop!

The ground upon which all his trees stand, is made ground—redeemed from the salt marsh, first by digging ample ditches, and using the material as far as it would go for filling up, and following with loam, leaves, street sweepings, weeds, old mortar, decaying chips, and almost all sorts of rubbish which he could obtain, but, chiefly—he emphasised—*tan bark*, which he had applied on this small space at the rate of twenty-five cords per year! He dwelt upon this part of his process with unusual earnestness and gratification.

Passing along, we thought if the ditches could talk, they would tell a favorable story. It seemed to us that they partook in some measure of the nature of common sewers, and collected at the hands of the proprietor an abundance of the richest materials both for trees and their crops. Be this as it may, Mr. Bacon has achieved a success nearer perfection than any thing else in that direction which we have ever witnessed. That success has been gained, mainly, by three things, viz:

1. *Thorough Drainage.*

That the drainage in this case is perfect, is evident from the fact stated by Mr. B., that a fortnight's rain makes no perceptible difference in the appearance of the land. Those who understand the philosophical principles involved in such drainage, will readily comprehend the advantages gained beside that of the passage of rain water through the soil.

2. *The Depth and Richness of the soil.*

The depth of soil under these trees is not anywhere less than *two feet*, and probably varies from that to *three feet*, and from the surface to bottom, it

is thoroughly mixed with the rich substances which have already been named. This is kept light and porous by frequent digging, so that nothing can be more convenient or inviting to roots of any sort of energy to run and feed in, than the bed which is prepared for them.

3. The third material point is that of *Shelter*. The importance of this is not yet fairly appreciated by our gardeners, even, and by the farmer is scarcely thought of in connection with his fields. Mr. Bacon's orchard is surrounded by buildings, only separated from it by passage-ways perhaps twenty feet wide, and by a fence next to the trees some eight feet high. On the south corner of the lot stands one of the largest trees in the number, and he remarked that he "should head that down, because the wind had too much power upon it."

It may be objected by the reader, that we cannot imitate this example in all of these points. We should not, however, plant pear trees where we cannot avail ourselves of the first, *drainage*—and the true policy is, not to set any more trees than we have the means of providing with a root-bed something like his, and then it will not be expensive to plant evergreens or put up fences for shelter.

Those of us who have already planted pear trees may find many valuable hints from Mr. Bacon's practice. If we cannot reach his excellence, let us, at least, attempt to *imitate* it, by occupying the entire ground with trees, say six or eight feet apart, and keeping them enriched and cultivated in the best manner, *as far as we go*. This course pursued with a dozen trees, will give us more profit than will three times the number managed upon the common plan.

We saw nothing in the practice of our friend, in regard to setting or shaping the trees, that required comment. The trees themselves were as clean and bright as the morning face of a pretty baby. The limbs and spurs were remarkably stout, and of a light gray color.

In reply to the question, "when should pears be gathered?" he said a "little time before they are ripe." When gathered, he places them on shelves in single tiers, in cellars. They are well ventilated, and a little moist, and so arranged that he has considerable control over the temperature. Many of his pears he sells himself, at prices ranging from $1 50 to $4 per dozen.

SIMPLE METHOD OF STRIKING ROSE CUTTINGS.—"Rusticus" describes his plan of striking roses in a late number of the *Gardeners' Chronicle*, as follows:

"I have been in the habit, for some years, of striking roses in what appears to me a much more simple way than is described in your paper of the 5th inst. At any time of the year, when they are to be procured, I take cuttings of any sorts of roses I want to propagate, (Moss included,) and cut the half-ripened wood into lengths of two eyes. I remove the bottom leaf, leaving the top one to rest upon the surface of the bed and nourish the cutting while it forms its roots. The hot-bed (a very slight one) in which I plant the cuttings, is made thus: On the top of a little manure, just enough to give a slight bottom heat, I place 6 inches of earth, moistened to the consistency of mortar, then cover with white sand, and set in the cuttings. I have occasionally struck every cutting, while 99 out of 100 are an average result."

For the New England Farmer.

VALUE OF MEADOW MUCK.

MR. EDITOR:—Much useful information has been received from time to time through the columns of the *Farmer*, in relation to the valuable properties of muck, and many farmers have, doubtless, been stimulated thereby to use it more freely than formerly. An article in your issue of the 16th, from the *Southern Homestead*, in which the writer, among other things, expressed his belief that not one farmer in twenty fully appreciates its value, induces me to state the method I have sometimes taken to use a considerable quantity of it on our own place.

The past season has been unusually favorable for the clearing out of old ditches and opening new ones, and having quite a surplus on hand, after filling my yards and barn cellar, I am now drawing at the rate of twelve to fifteen ox cart loads per acre to all my high ground, (ten or twelve acres,) that I intend to plow next spring, spreading as fast as I draw it. To plow this in at once, in its green state, I have no doubt would prove rather injurious than otherwise to the soil; but spread out thinly, exposing it to the freezing and thawing process from Nov. to April, it becomes completely pulverized and slackened, and so rendered fit for use. I do not, of course, depend on this alone for a crop, but use the same amount of animal and compost manure that I otherwise should. I tried the same method a few years since with five or six acres of orcharding, and still later, with another piece of high gravelly soil, in both cases, I think, with favorable results. It is no doubt possible to use too much of this valuable material. To repeat this dose every year, or even once in five years, would not perhaps be advisable, but thoroughly slackened by frosts, or mixed in suitable proportions with animal manure, ashes, seaweed, &c., I apprehend few farmers use it to excess.

I derive so much pleasure from seeing things grow, and helping them to grow, that I frequently purchase small quantities of plaster, ashes, guano, or phosphate, to stimulate a certain crop that needs a little more food than I can otherwise give it, but with the exception, perhaps, of ashes, I think I have never realized more than dollar for dollar on the sum expended in such fertilizers; but decomposed material gathered up from our own place costs comparatively little, and yields in my estimation four fold. It is very important to make all the manure we can in our yards, barn cellars, &c., but I apprehend some farmers waste labor by drawing more muck into their yards than can be saturated or mixed to advantage. Labor is so im-

portant a consideration on a farm, that we cannot afford to haul material out of our yards, in the same state in which we haul it in. I think those who have a supply of muck on hand, and high lands requiring its use, will do well to use a part of it in the manner I have practiced.

JOHN F. FRENCH.

North Hampton, N. H., Nov., 1861.

REMARKS.—We are always gratified on finding our friends properly appreciating the value of meadow or swamp muck. It is capable, we have no doubt, when properly used, of doubling the productive power of many of our New England farms. Standing by the side of a grass field of twenty acres some time since, with a friend, he inquired if we could observe a difference in the crop on any portion of the field? We replied in the affirmative, and readily pointed out that portion where the grass was thicker and more luxuriant than on any other part of the lot. "Well," said he, *"thirty years ago,* that strip where the grass is so much better, was heavily dressed with meadow muck, and with that exception has always been treated just like the rest of the field!" The land is a sandy loam, and all lies on nearly the same level. The strip dressed with muck had annually given a better crop than the rest of the field.

For the New England Farmer.

SHINGLING.

Can I aid the readers of the *Farmer* by a word or two about shingling? Every farmer is put to great expense for roofing. It is quite obvious that some of the expense is needless.

In the first place, *a roof should have a good pitch.* Many roofs in our country are too flat; the wet don't drain off readily. The English people build with high peaked roofs; more necessary with them, on account of their damp climate. A flat roof, if tight at first, will last but a short time; water will find its way under the shingles and not dry out, and decay will at once commence.

The kind of Shingles.—I don't believe much is saved by using cheap shingles. The labor is more in laying them. They last from seven to fifteen years. A good shaved pine or cedar shingle will last forty years. A shingle should wear out, not rot out. How often it is seen that roofs with rows of shingles of full size and thickness, are one mass of spongy rot.

The result of my experience is, that shaved shingles are preferable to sawed. Water has a tendency to follow the grain of the wood, and oftentimes a sawed shingle will soak through. The principal reason why a shaved shingle lasts so long is, that it does not hug down so tight to the roof as the sawed one, and soon dries after rain. Carpenters are often careless about the breaking of joints. If the shingle has but a small lap, in a few years it will have worn off the edge, and have shrunk so as to let in wet.

I have been amused at some new methods of shingling recommended in the *Farmer.* One was, to shingle right over the old roof, without disturbing it! A man who would do that would make his toilet by putting on his clean shirt over the soiled one.

Somebody has a preparation to swab on which will make any roof water-proof. The few who have tried in this vicinity, for a short time, the brown paper and highly fragrant coal tar, for protection from the weather, have gone back to shingles again—sadder, wiser and drier men.

WM. D. BROWN.

Concord, Mass., Nov., 1861.

GLANDERS.

Although this disease has been pronounced incurable by Mr. Bauley, of Alfort, some cases are reported in the *Gazette des Hopitaux,* in which the attempts at a cure proved successful. In April, 1859, writes Dr. Joufflet, of Montrouge, I bought a thorough bred mare, seven years old, and apparently sound. One month later; pustules in the legs ulcerating; sub-cutaneous abscess, glands, oedema of the limbs. Mr. Reynal, of Alfort, diagnosticated chronic glanders requiring slaughtering. No running at the nose; nothing there, nor in the pharnyx or the mouth. I could not consent to such a sacrifice, but instituted this treatment: 75 grains of sulphur twice a day, common salt, iodine, good diet. The sub-cutaneous abscess opened of itself; a degenerated ganglion formed an enormous vegetation. I removed it, and to combat suppuration, I administered the fresh leaves of aconite. The animal was losing flesh. I continued this treatment for four months, aided by good diet: barley, wheat, oats; and to-day my mare looks so well that I am beset by amateurs, who want to buy her.

One of my friends had a horse in the same condition, and was going to have it slaughtered, as it did not eat. It was placed under the same treatment: injections, tincture of iodine, sulphur at meals. After a few days, the appetite returned, and with it the strength, etc.

Two farmers, father and son, contracted the glanders from five horses affected with it. The father fell rapidly as a victim of the disease. The son, whose disease assumed the chronic form, was placed by Dr. Lesur under a mercurial treatment; calomel internally and cauterization of the pustules with the acid nitrate of mercury. One month after, the cure was complete.—*American Medical Times.*

A NEW FENCE.

Mr. CHARLES R. SMITH, of Haverhill, N. H., recently put up on our farm a few panels of a fence which he has invented, and which is well worth the attention of all our farmers who are obliged to resort to materials of wood for their fences. It is so constructed as not to come in contact with the ground at all, but rests upon common stones, such as may be found in most stone walls between fields. It seems to us to be an economical and durable fence, and that one well put up and kept whitewashed, would last at least fifty years. We are not able to give the cost per rod, but intend to learn what that will be, the coming spring.

For the New England Farmer.

CONTRASTS IN FARMING.

MR. EDITOR:—A trip over what used to be the main thoroughfare for travel between Northern Vermont and New Hampshire to Boston, in the latter part of October, enabled me to see something of the farmers and their farms; and, as I have nothing better to do just now, I will venture to write down a few observations about them.

Within a few years, the general appearance of the farms, in those sections of New Hampshire and Massachusetts through which I passed, has improved very much. Neatly painted houses, and substantial, well finished barns, have taken the places in many instances of those much less so; and unmistakably prove that farming is not always "a losing business." But, O, the fences!

In speaking of houses, why do not more of our farmers, who are about to build new ones, avail themselves of the modern improvements in house architecture? Neat, tasteful and convenient houses, like some of those designed for the *Farmer*, can be built at about the same cost as the square, old-fashioned structures of a former age. There is still in this enlightened age, and in our own New England, a great prejudice against "book farming," and, in passing along, one need not greatly err in guessing where farmers of this stamp live. The out-of-door as well as in-door indications that they *don't* afford to take agricultural papers, are too apparent to be mistaken. Look at exhausted fields, and the scanty yield of grain and grass, and near by, immense deposits of muck untouched. Look at the rich swamp lands which only need thorough drainage to make them equal the prairies of the West. Look at the thousands of brooks and rivulets, whose babblimg waters might be made to irrigate tens of thousands of acres, now parched and withered by every summer's sun, which, with a little knowledge and a little labor, might be made to yield ten-fold.

The scarcity of public houses upon the road made it necessary to make the acquaintance of one of this class of farmers, where we stopped to get oats for our horse. The great "barny" house was situated close to the road, and, after an unwelcome salutation from a great surly dog, and a "get out" from his surly master, we ventured within. Our "first impressions" of the dog and his master, and their home, were not very favorable. Although he treated us kindly, "get out" was written all over his hard, solid face. His history of "hard times, poor crops, hired man gone to the wars, sons to California," was in perfect keeping with the out-door embellishments of broken carts, plows, &c., which lay scattered about. An almanac, an old account-book, and a newspaper of doubtful loyalty, were the only evidences of a library, or of reading, we could discern. Not a shrub, not a tree was visible to look upon, or break off the glare of the noon-day's sun from his cheerless home. A beautiful maple, spared by the woodman of another age, he had cut down because "the plaguy birds built their nests in its branches, and it prevented him from seeing the cows when they got into the corn." From youth to manhood and old age, here is no improvement, and no more hopes of any than in a Bedouin Arab. With another growl from the dog, and another "get out" from the master, (which our self-respect, and respect for human nature, makes us think was intended for the dog, and not for us,) we bade him good-bye.

In striking contrast with this were the home and character of another farmer. The neat and tasteful cottage situated well back from the road, the beautiful lawn, the well-kept walks and driveways, the well-built and convenient barn, the flourishing orchard, the garden, with fruits and flowers, and the work-shop and library, were the outward tokens of an intelligent farmer. The single expression, "I cannot bear to be idle," explains it all. The stranger, visitors, friends and kindred find within neatness, order, elegance and refinement, with true politeness which springs only from a kind and genial spirit. The birds find in him a friend, and build their nests close up to his very door, and childhood, mute as to words, expresses its consciousness of being loved, in the outbursts of a joyous nature. Here is everything, thought I, to make life happy, but, ah, not everything. That priceless blessing, sound, robust health, has been denied him.

An educated, working farmer, with the moral and social qualities duly cultivated, is the noblest type of manhood. Such a man writes his history on everything about him, and its bright pages will be read long after he has passed away from the living. North or South, such men are never bigots nor traitors; and their example is much safer and worthier of imitation than his whose footsteps are followed by the tramp of armies.

Farmers, "take the papers." Read, study and experiment. "Let us improve the mind and the soil," and the world will be the better for our having lived in it.

S.

Haverhill, N. H., Nov., 1861.

WHAT "ROUGHING IT" MEANS.

"Roughing it" has various meanings, and the phrase is oftentimes ludicrously mistaken by many individuals. A friend with whom we once travelled, thought he was roughing it daily for the space of three weeks, because he was obliged to lunch on cold chicken and uniced Champagne, and when it rained, he was forced to seek shelter inside very inelegant hotels on the road. To rough it, in the best sense of that term, is to lie down every night with the ground for a mattrass, a bundle of fagots for a pillow, and the stars for a coverlet. To sleep in a tent is semi-luxury, and tainted with too much effeminacy to suit the ardor of a first-rate "Rough." Parkyns, Taylor, Cumming, Fremont and Kane have told us how much superior are two trunks of trees, rolled together for a bed, under the open sky, to that soft, heating apparatus, called a bed, in the best chamber. Every man to his taste—of course, but there come occasions in life when a man must look about him and arrange for himself, somehow. The traveller who has never slept in the woods, has missed an enjoyable sensation. A clump of trees makes a fine, leafy post-bedstead, and to awake in the morning amid a grove of sheltering, nodding oaks, is lung-inspiring. It was the good thought of a wanderer to say, "the forest is the poor man's jacket." Napoleon had a high opinion of the bivouac style of life, and on the score of health, gave it the preference over tent-sleeping. Free circulation is a great blessing, albeit we think its eulogy rather strongly

expressed by the Walden-Pondist, when he says, "I would rather sit on a pumpkin, and have it all to myself, than be crowded on a velvet cushion. I would rather ride on earth in an ox-cart, with a free circulation, than to go to heaven in the fancy car of an excursion train, and breathe a *malaria* all the way." The only objection to out-door slumber is dampness; but it is easy to protect one's self in wet weather from the unhealthy ground, by boughs or India rubber blankets. — *Atlantic Monthly.*

AGRICULTURAL ADDRESS.

We have before us an address delivered by LUTHER H. TUCKER, Esq., before the Oswego County Agricultural Society, New York, in September last. Mr. T. is one of the editors and proprietors of the *Country Gentleman* and *Cultivator*, published at Albany, two of the best agricultural papers which we see. The address is an excellent one, abounding in good thoughts, well expressed. Its leading heads are,—"Low prices necessitate better farming;" "Are we to anticipate the continuance of low prices?" "The course of our agriculture in the past;" "Is our farming of a paying or progressive kind?" "Money-making in any pursuit mainly dependent upon industry and skill." Under this head he says:

In speaking of the profits and pleasures of farming, we must put it upon the same level as we should an occupation of any other kind. Suppose I address my neighbor, the tailor, or the shoemaker, and ask if tailoring or shoemaking pays, and is an agreeable way of life? Suppose I turn to the merchant or the lawyer, and inquire whether over the counter or before the court, there is money to be made and enjoyment to be won? In either of these, or in any similar case, it is easy to predict the answer, when you are questioning a man of industry, of a reasonable degree of economy, ability and skill, who has a taste for the pursuit in which he is engaged. Indeed, with success, there almost always comes a taste for that which is the source of success, if, as is not impossible, it may not have previously existed in a very prominent way. But go, on the other hand, to a shiftless mechanic, a careless, credit-less merchant, an indolent or blundering lawyer, and you will be sure to learn that either of these emplyments is an inevitably laborious and losing one, if not also intensely disgusting and disagreeable! It is the bad workman quarrelling with his tools. There are of course exceptions, here, as to other rules. But in farming, as in the other established occupations of mankind, we are nevertheless obliged to conclude that when it fails to be reasonably remunerative, the fault must be in the particular individual or circumstances, not in the class and pursuit to which they belong.

The subjects that follow are,—"The deterioration of our soil and crops unsupported in fact—Importance of agricultural statistics;" "The problem of maintaining the fertility of the soil;" "Animal life becoming in turn the support of vegetable life;" "The resources of any soil may be exhausted, or, by good management, rendered practically illimitable;" "How nature may co-operate in maintaining and extending these resources;" "Good farming the surest and cheapest." Under this head, Mr. T. says:

Good farming is the surest farming, as it is also the *cheapest farming;* for every additional bushel of grain or hundred weight of hay which is grown upon an acre lessens the cost per bushel or per cwt. of all the rest—the labor being in proportion to the *surface cultivated*, rather than to the crop produced. Said a young farmer to me the other day—"I only mow one-half the number of acres I did four or five years ago—having let a part of my grass land for pasturage; but, by greater economy of manures, my hay crop is now as large as it was before, and I keep just as much stock the year round." There are probably similar instances within the knowledge of you all—affording ample illustration of the truth I have been endeavoring to enforce—that none of us have as yet fully tested the capabilities of our farms under a proper system of management. How many of us, for example, in the older settled parts of the country, have in truth better and as yet untouched farms, awaiting the plowshare and the plant-root, away down underneath the ones we have been so long and so *shallowly* cultivating on the top.

Some of the other topics discussed are,—"Bad farming at the present day less excusable than ever before;" "One well fed acre more profitable than three poor fed acres;" "Average crops as estimated sixty or seventy years ago," and "A prosperous agriculture the foundation of all national prosperity."

All these topics are discussed with a clearness which shows that the writer has given them much thought and research. The address is an excellent one, and cannot fail to help on the good work wherever it is generally read.

For the New England Farmer.

THANKSGIVING DAY.

This day is connected with events of importance, and is of great interest to the farmers who are more directly dependent upon the object of its observance than any other class of people. The New Englanders have observed it ever since its first appointment by the "English fathers," as a day of thanksgiving; and now almost every other State in the Union have joined with them to celebrate its annual return.

Since the causes which impelled the Pilgrims to resort to prayer and thanksgiving, on this day, have added so much to the moral and religious character of the people of New England, a brief sketch of the events of the day may not be uninteresting to the readers of the *Farmer.*

It was in the year of 1621, that the colonists of New England gathered their first harvest; and, as soon as they had done this, they sent out four huntsmen for fowls, and when they returned, having been successful, the Pilgrims, "after a special manner," rejoiced together, because they had been blessed with a bountiful harvest. That noble In-

dian chief, Massasoit, and ninety of his men were present on the occasion, and participated in the festivities. Thus the festival of "Thanksgiving" was instituted in New England, and those noble lords of the forest united with the Pilgrim fathers, in peace and harmony, on this memorable day.

In the second year after this festival, the day was rendered more solemn and impressive in consequence of an almost providential deliverance of the colonists from an impending famine.

"In 1623," says the historian, "fears were entertained for the safety of the colony, by reason of anticipated famine." For weeks and months the colonists suffered from a severe drought. Corn withered under the heat of the scorching sun. Every vegetable, shrub and tree, bore signs of anticipated famine. The Indians prophesied famine for the suffering colonists, for, by starvation, they thought they could easily conquer and subdue the "pale faces;" but those brave and faithful Pilgrims were not to be discouraged, nor dismayed. In this fearful extremity, a day of public fast was appointed, and was accordingly observed with "great solemnity." This was the first Fast Day ever kept in this country. The day opened with no better prospects of rain. Nine hours, these trusting Christians continued in prayer. At length, towards evening, clouds began to collect, and before morning, rain descended in refreshing showers, and thus it continued to rain for several days, until the crops revived, and the fields were clothed in their former verdure. A bountiful harvest succeeded. In token of general gratitude for this deliverance, a day of public thanksgiving was ordered, being the second such day ever observed on these Western shores.

This festival was originally confined in its observance to the State of Massachusetts. Now, almost every State in the Union, if not all, hail its return, and join in its celebration with gratitude and joy.

This day is productive of many pleasing reminiscences connected with our childhood, and with those whose familiar faces we have been accustomed to look upon, on this day, but who are now gone to their peaceful rest.

When we have met around the festive board to exchange greetings and smiles, and to enjoy the plentiful repast before us, we should not forget others whom misfortune has deprived of the real comforts and blessings of life; who are now struggling for the life-blood of our nation. Let us give our prayers for the restoration of peace, and be thankful that we have lived to participate in a festival in token of gratitude for a bountiful harvest.

A Green Mountain Boy.

West Charleston, Vt., Nov., 1861.

Simple Method of Striking Rose Cuttings.—"Rusticus" describes his plan of striking roses in a late number of the *Gardeners' Chronicle*, as follows:

"I have been in the habit, for some years, of striking roses in what appears to me a much more simple way than is described in your paper of the 5th inst. At any time of the year, when they are to be procured, I take cuttings of any sorts of roses I want to propagate, (Moss included,) and cut the half-ripened wood into lengths of two eyes. I remove the bottom leaf, leaving the top one to rest upon the surface of the bed and nourish the cutting while it forms its roots. The hot-bed (a very slight one) in which I plant the cuttings, is made thus: On the top of a little manure, just enough to give a slight bottom heat, I place 6 inches of earth, moistened to the consistency of mortar, then cover with white sand, and set in the cuttings. I have occasionally struck every cutting, while 99 out of 100 are an average result."

For the New England Farmer.

CULTURE OF PEARS---VARIETIES.

The great variety of pears now cultivated by nurserymen, renders it rather a difficult matter for an amateur, with a small garden, to make satisfactory selections. Hardly two men can agree upon the best varieties. One man's soil develops a few kinds only to perfection, while another's brings up to a high state of excellence other kinds. Besides, men's tastes differ very much. One individual may possess an old tree which matures its fruit to perfection; while another is dissatisfied with the same fruit grown on younger trees. The Glout Morceau, on young standard trees, is almost worthless; but on matured trees, excellent. Some soils or positions bring up the Beurre Clairgeau to a high and beautiful color, while others leave it a russet hue. So also with the rich coloring of the Flemish Beauty. The Vicar of Winkfield, as a table pear, is harshly judged from its general product, whereas, only the finest and largest are fit to eat.

A good plan for an amateur is, to plant merely healthy *stocks*, for the most part—especially if he is making additions to his collection—as in a little time he will be better able to judge for himself what varieties do best with him or with his neighbors, and then graft the stocks accordingly. By this process he will get large trees equally as soon as by setting grafted varieties, and without so great a liability of disappointment.

If a person requires a few dwarf trees, it is well to purchase the Louise Bonne de Jersey, the Duchess d'Angouleme, the Urbaniste and Flemish Beauty, or others whose junction is strong and healthy, and then re-work upon them to his fancy—for all, or nearly all pears, do well double-worked upon the quince root.

To facilitate the striking of pear roots from dwarf trees, they should be set from two to four inches below the junction, even if many of the bottom roots are sacrificed; and at the same time of setting (if in the spring,) or better, in the following July, the bark should be raised in two or three places, with a sharp knife, on the lower edge of the pear stock. On the closely pruned quince roots fibres will readily appear, and the returning elaborated sap, or cambium, will be likely to make deposits at the slits, from which pear roots will proceed.

Many foreign winter varieties, hard to mature in our climate, should be planted in the warmer and dryer situations, but the earlier varieties will ripen in a heavier or damper soil.

Though many of the hundreds of pears under cultivation are faulty or worthless, still there are a dozen or twenty varieties which, by general consent, are well worthy of extensive propagation.

Among these may be mentioned the Rostiezer, Bartlett, Flemish Beauty, Belle Lucrative, Urbaniste, Duchess d'Angouleme, Glout Morceau, Lawrence, Beurre Diel, Beurre d'Anjou and Winter Nelis. The Beurre Clairgeau is very showy and saleable, and though not first-rate, improves by keeping. The Beurre Superfine I regard as more valuable, and is a variety very highly recommended by Mr. Field in his work on pear culture. It answers to all the good traits of a fine fruit, and is later than, and hence need not compete with, the Bartlett. The Seckel is an old sort, and has made its reputation; but as it is slow in coming into bearing, and requires a very high culture to produce fruit of decent size, other kinds are now regarded as more profitable. Though sweet and delicate—too sweet for many tastes—it lacks that sparkling, champagne flavor which now seems to be the criterion of superior excellence. And the same may be said of the Belle Lucrative, which is a dead sweet, and though popular, does not, as far as I have noticed, develop the great proportion of its fruit, as many other varieties do, and is inclined to drop it prematurely. The Beurre Bachelier—a late pear which grow enormously in France—is promising finely here, and from specimens which I have grown the past season on a standard tree, I regard it as an important acquisition.

Besides the above, which constitute a portion of the good pears, many native seedlings are claiming notice—among which prominently stand Mr. Dana's—and probably they deserve it.

West Medford, Dec., 1861. D. W. L.

AGRICULTURAL DIVISION OF THE PATENT OFFICE.

We learn that during the first three-quarters of the present year members of Congress have been supplied for distribution to their constituents with about six hundred thousand papers, containing one hundred and fifty-four varieties of vegetable and two hundred and thirty varieties of flower seeds—many of them new and very choice, and others very old and excellent kinds, but not in general cultivation. Some ten thousand packages (each containing two quarts) of cereals were also distributed to the members. These comprised new and choice varieties of wheat, oats and barley from France, Germany, Italy and Turkey.

Upwards of eleven hundred Agricultural Societies, in every part of the country, also received their quota for distribution in their respective communities—to an amount of three hundred thousand papers of vegetables and flowers, and ten thousand packages (two quarts each) of cereals.

In addition to the above, it is estimated that upon personal or written application to the Agricultural Division twenty thousand of our countrymen and fair countrywomen have been supplied with five hundred thousand papers of vegetable, flower and field seeds during the three-quarters of the year referred to.

The fourth quarter of the year will unquestionably show an amount of labor and usefulness in full proportion to the above.—*National Intelligencer.*

THE man whose word can always be depended upon, is sure to be always honored.

For the New England Farmer.

SYNOPSIS OF THE SEASONS.

BY R. F. FULLER.

Enter SPRING.

My kind friends, good morrow! you know who I am;
And SPRING does not need to tell any her name.
The flowery dresses I constantly wear,
And train of attendants, my name all declare.
You wonder, perhaps, how a little young thing,
Like me, has dethroned old WINTER, the king?
I killed him by kindness—that's often been done;
By smiles and by sunshine his sceptre I won.
If *you* try my method, it often will prove
No force in the world is so potent as love!
Although you may think me a gay, laughing thing,
Just hear a good word of advice from the Spring!
Sow your seed in the evening, and sow it at morn!
For soon will the season of seed-time be gone!
Dear children! now plant seeds of knowledge and truth:
In manhood you'll reap as you sow in your youth!
Sow merry if may be; but sow, though in tears;
And joy shall be yours when the harvest appears! [*Exit.*

Enter SUMMER.

My name is the SUMMER—longer days will I bring,
Than those, that have left you, i' the train of the Spring.
Spring bears many blossoms, that fade as she goes;
But I alone bring you the beautiful rose!
And insects I've many, of gorgeous wing,
Who could not endure the caprices of Spring.
A thousand gay flowers the Summer shall wear,
That breathe balmy sweets on the sunshiny air!
Though some days are warmer than all of you suit,
Remember, they 're needed for corn and for fruit.
My grottoes, how grateful—my even and morn!
—You 'll know how to miss me, when Summer is gone!
[*Exit.*

Enter AUTUMN.

My name is the AUTUMN—I know I appear
More staid than my sister, so recently here.
And some do not like me—but such you will find,
Are those of a feeble or frivolous mind.
My falling leaf whispers a tale so forlorn—
"The harvest is ended, and summer is gone!
And life has its seasons"—it mournfully saith—
"Youth, manhood and age; and, after, is death!"
But those who, in springtime and summer, have wrought,
Find a harvest, in Autumn, of happiest thought.
Ere dropping, how gorgeous a robe are the leaves!
What a cause for thanksgiving the shock and the sheaves!
Though Winter is coming, and soon will be here;
They're ready, who've worked in the rest of the year!
[*Exit.*

Enter WINTER.

How d'ye do? Methinks that your welcome is cold,
In greeting again an acquaintance so old!
I hope that you have not forgotten me, yet,
Though favors, I know, all are prone to forget!
Why, 'tis not, I'm certain, a year quite ago,
I spread you a carpet of new-fallen snow!
Then merrily jingled the bells of the sleigh,
When lads rode with lasses, and laughed all the way.
How often I've heard you declare, every one,
There's never a season like winter, for fun!
And those, in my evenings the long taper burn,
All say, that in winter 's the season to learn.
And, then, too, very often, when some will complain,
And sigh for the beauties of summer again,
I've hung my bright jewels of ice on the tree,
And all have admitted, none dazzle like me.
—Now, listen, my children! as older you grow,
You'll find there's great use in the ice and the snow.
Nor, could you enjoy thus the SUMMER and SPRING,
Except for the reign of old WINTER, the King! [*Exit.*

For the New England Farmer.

SALT FOR ANIMALS.

MR. EDITOR:—It is thought by some, that salt, instead of being beneficial, is so injurious to animals as to do them more harm than good, so that they had better be without it than with it. More than a year ago I heard a farmer in this town declaim very earnestly against the use of salt. He spoke very eloquently and decidedly upon the subject, and pointed out several instances in which he had known salt to be injurious to animals. I can not remember all the particular instances he gave; but they were something like the following:—One farmer had lost a fat cow by letting her eat as much salt as she pleased. Another farmer, from the same cause, had lost the use of a fine yoke of three-year old steers which had been so injured as to be unable to do any work for three months. Another farmer, from the same cause, had lost a large flock of sheep, which had become so rotten and diseased that several died daily.

Now, this all sounded very well, though it was somewhat alarming to some of those present. It was uttered very smoothly and gracefully, and with great apparent sincerity. It was rolled from the tongue in a very flippant and tripping manner which seemed to challenge the possibility of a doubt; and yet, it is now, as it was then, very evident, that the whole truth was not told; because it was not so much the *salt*, as the *quantity* of salt that did the mischief. It is not true, that salt generally injures animals. It is only when eaten in *exorbitant quantities*, that salt has an injurious effect. It is highly probable, that the same animals would have been equally injured, if they had been fed upon any kind of grain, and allowed to eat all they would, after they had been for a long time without it. The truth probably is, that the animals had not been salted for several weeks, so that, when they had access to salt, they ate so much as to injure them. It is true, that all animals are exceedingly fond of salt; their nature craves it; they eat it with the greatest avidity, especially when they have been long without it; and, therefore, they are liable to be injured by it. If they are allowed to have salt every day, they will never eat too much, or be injured by it. It is only when they have been a long time without it, that they devour it with so much greediness as to be injured by it. The daily use of salt, in moderate quantities, is exceedingly beneficial to them; but large quantities devoured by them, after they have been long without it, are almost always injurious. Besides, the daily use of salt enables animals to take on fat faster than they otherwise would. The salt they eat acts also as a vermifuge, destroying many kinds of worms in the intestines of animals, and conferring a healthy tone of action throughout the whole animal economy.

My practice is to allow animals to have daily access to salt. They eat it moderately almost every day, both in summer and in winter; and yet I never had an animal eat so much as to be injured by it. I do not believe, they ever will eat too much, if they have access to it every day. I always keep a trough full of salt in the yard under cover, and allow every animal to eat as much salt as it pleases.

About two years ago, I purchased a cow that had not been properly salted. She appeared to be almost crazy to get at the salt-trough; and it was difficult to keep her away from it. I salted her privately every day for a week or more, giving her a moderate quantity, but not allowing her to go to the trough to eat as much as she would. During all this time, she was gnawing all the old boards, bones, rags and scraps of leather that came in her way. After a while, she calmed down, and became very gentle and tractable, eating only a moderate quantity of salt, but still continuing to gnaw the articles above mentioned. I then purchased some bone meal, and fed her on that. After eating it freely and voraciously two or three times, she refused to eat any more, and immediately left off gnawing those articles.

Not long since, I bought a cow of a man who keeps a livery stable in this town. He sold the cow, because she was all the time gnawing his harnesses, and he could not keep her from them. When I first had her, she was as crazy and restless as a June bug. She evidently had a craving appetite for something beside her ordinary food. I gave her a pailful of swill daily, and a moderate quantity of salt. She ate them both greedily, especially the salt. Her appetite for salt was soon satisfied in a degree; she became very quiet; and she is now allowed to have free access to the salt in the trough, and she never eats too much of it. I do not think I have entirely cured her of her propensity to gnaw harnesses, because it is highly probable that other elements beside salt are needed to accomplish this object. But I do believe that she will gnaw them with less avidity than before, and that the habit of gnawing them was superinduced by neglecting to give her regularly a sufficient quantity of salt. Be this as it may, I shall soon put her to the test. If she still shows a disposition to gnaw things, I shall feed her on bone meal, if I can obtain it in this neighborhood. If I fail to obtain that, I shall sprinkle ashes with her other food; or, perhaps, still better, I shall give her small doses of soap for a few days, till her appetite for such things is entirely overcome.

JOHN GOLDSBURY.

Warwick, Dec., 1861.

WORKING HOGS.—The *New England Farmer* says: "We do not work our hogs, either in harness or on the manure heaps. An Irishman can overhaul the manure heap much cheaper than the hogs can." This is all very well, but still we see no objection to letting store hogs root in the barn yard and pick up scattered grain, &c. On a farm where much grain is fed out, a few young hogs can be wintered in this way at a very trifling cost.—*Genesee Farmer.*

REMARKS.—Certainly. One objection to *working hogs* is, that they are kept half starved in order to *make them* work. This process is cruel to the animals and wasteful to the owner of them.

STATISTICS go to prove that tea is used, more or less, by one-half of the humau race—500,000,000 of people. Theine is the peculiar organic principle which gives tea its value. Taken in small quantities, tea is healthful; but the extract of one ounce taken per day, by one person, produces trembling of the limbs and wandering of mind.

For the New England Farmer.

IMPORTANT THINGS TO KNOW ABOUT BUILDING.

One of the faults of our New England people is their great haste. No sooner is a thing conceived, than it is produced. This is commendable in part, and will do in some directions, but not in all.

We astonish the eyes and senses of an Englishman, who may chance to call at some New England village, when we show him round and tell him that two years ago, there was not a building in this place, except that old mill you see down yonder. We shall be amused as well as instructed by his complimentary reply, which we shall perceive is meant more for himself than for us. After stretching himself up into a very significant attitude, he says, "Well, you are a very fast people; you grow up wonderful quick. But we don't do things after this sort in Hold Hingland. Our cities are not built up in one year. Neither will you see them come tumbling down the next."

It is true that many of our New England villages grow up like mushrooms, and are not much more durable. Some men pretend that they are doing a wonderful good thing for the poor people, when they go into a place and stick up a cluster of slash houses, and offer great inducements for people of small means to purchase a new house, very cheap, and make for themselves a nice little home. And by fair speeches and a little putty, many poor fellows are seduced into their clap-trap. They buy a cheap house, pay down some two hundred dollars, (all the house cost, very likely,) give a mortgage to the builder for the balance, which, of course, "may lie as long as you wish;" but before another sun has set, that nice little mortgage has slipped into the hands of a certain money-changer, at some twenty-five or fifty per cent. discount, and the builder has pocketed a smart profit, and gone home to smoke his cigar. The poor man, with his cheap house, soon begins to learn, by every gust of wind and every shower of rain, how badly he has been cheated, and in a few years his nice little house is worthless. The result of the whole operation is this: The builder made a little money, created a nuisance, and made people poorer. My advice is, never buy a slash built house, no sooner than you would an English shoddy blanket.

But, Mr. Editor, this is not what I was going to say. Mr. Harney, of Lynn, has contributed drawings of some very elegant looking mansions and cottages. They look inviting enough to give most any one a longing to possess one; yet they are lacking in many of the most essential conveniences that a farm-house needs. To make a dwelling delightful and pleasing, we must unite convenience with style and beauty, or they may prove to be like Jefferson's wind saw-mill on the hill. Having had considerable experience in building, I will state what I deem of great importance in the materials for building. All the lumber should be seasoned and dry before worked; as a general thing, very little attention is paid to this, except for the finish stock. To make a tight, durable roof, both boards and shingles should be dry when laid; else the shingles will crack between the nailing by shrinking. Nail the shingles pretty well up, to keep them from the wet. Nails driven into unseasoned stock will rust off, after which the shingles will give themselves up to the winds. It is always cheapest to use the best pine or cedar shingles on a good building. When perfectly dry, paint two coats with Brandon red, which may be mixed with a cheap oil, prepared for such purposes; though the best linseed oil is most durable; add a little blacking, to give it a deep red color, if you fancy it. A roof well covered in this manner, is done for a lifetime. It is a great mistake that people do not paint their roofs; it is just as essential for their preservation and durability, as for the clapboards on the sides. The boards for the side should always be dry; else you will find your clapboards cracking by reason of the boards shrinking.

A. PHILBRICK.

East Saugus, Mass., Dec., 1861.

For the New England Farmer.

CATTLE GNAWING BONES.

Inquiries are constantly made, and many times answered, in relation to the cause and cure of this singular habit of cattle—more particularly cows. Cows kept on white grass hay in winter, or in white grass pastures in summer, will almost inevitably indulge in this practice. The cause is undoubtedly the loss of carbonate of lime in the system, from an absence of carbon and lime in their food. When the lands of New England were new, this phenomena was unknown. It is the natural result of an exhausted soil. When cows are fed upon clover, hay or grass, or other articles of food which contain all the elements which enter largely into the secretion and production of milk, the instance will be rare in which they will meddle with chips and bones. The great mystery of the cause lies more immediately in the want of a knowledge of the sciences which reveal nature's process for changing earth, air and water into bread, milk, meat and clothing. A sufficient quantity of milk for the manufacture of a firkin of butter will require all the caustic lime, in a crude state, that is contained in the butter in an organized condition, and if not supplied in the animal's daily food, will draw on the system for such supply, which has been organized there for the purpose of making bone. *Where* and *what* these materials are, and *how* they can be so combined as to produce the greatest quantity of milk without destroying the vital organism of the system, are questions which interest every person who owns a cow. Early cut clover, Timothy and red-top are sweet, juicy and nutritious, and possess the power to produce milk and make bone. So a grain of corn, for instance, possesses in a well-organized arrangement, the phosphate of lime and magnesia; also the salts of iron, lime and starch, which enter largely into the composition of bones, and most of the glutinous matter to be found in lean meat, tendon, tissue, and the jelly found in bones. Cows fed upon these vegetable materials can have no hankering for chips and bones.

A neighbor of mine says one-half ounce of saltpetre, (nitre,) given in some corn meal one or two mornings, will effect a temporary cure. Every farmer who has none but white grass pastures and white grass hay, may rest assured that his cows will give *white* milk, hanker for chips and bones, and *limp* with the "bone ail." L. L. PIERCE.

East Jaffrey, N. H., Dec., 1861.

ORNAMENTAL PEAR TREES.

BY WILLIAM SAUNDERS, LANDSCAPE GARDENER, GERMANTOWN, PA.

[We are indebted to the kindness of the Publishers of the *Horticulturist* for this beautiful cut of a *Buffum Pear Tree.* The accompanying remarks we also copy from the same work.]

There is probably no species of tree that produces greater variety in form of growth than the pear. It would be difficult to imagine any form in a deciduous tree that is not duplicated in some of the great variety of this fruit. Those of a spreading growth frequently assume that dependent habit so much admired in the Elm, Linden and Silver Maple; of such are the Summer Bonchretien, Beurre de Capiaumont, Beurre Diel, Beurre de Ranz and Passe Colmar. The round, compact form of the Seckel is readily distinguished. The symmetrical growth of Vicar of Winkfield, Tyson, Buffum and many others, is not excelled among deciduous trees, as may be seen from the accompanying engraving of the last named, which is a faithful representation of a tree growing in the grounds of Messrs. Ellwanger and Barry, Rochester. I can vouch for its accuracy, having accompanied the artist, Mr. Hochstein, while he was *taking* it. This tree possesses much of that refined massiveness of habit, and graceful delicacy of stem, the perfection of which belongs exclusively to the Sugar Maple.

There is as much beauty and variety in the foliage of pear-trees as there is in their habit of growth; the broad deep green leaves of the Vicar of Winkfield, Napoleon, Chamoisine, the Jaminette, and particularly the beautiful glossy foliage of Baronne de Mello, are always admired.

The fall coloring may also be noticed; among the most decidedly effective are the White Doyenne, Doyenne Boussouck and the Buffum. The Glout Morceau, one of the most beautiful of pear-trees, retains its leaves fresh and green after all others fade; indeed, this plant grows so freely, and at the same time so *stocky*, that I would suggest its use as a hedge plant, for dividing lines in the fruit garden; few plants are better adapted to this purpose.

[The suggestion of Mr. Saunders, that the Glout Morceau should be used as a hedge plant, is a somewhat novel one, and we should be glad to see it put in practice. With proper attention to pruning and thinning out, a hedge of this kind might be made both useful and ornamental; the fruit, we think, would ripen fairly, and fully repay any extra labor that might be bestowed upon it.—Ed.]

BUFFUM PEAR TREE.

A FARMER IN THE CHAIR OF STATE.

Below we give an article from the *Providence Journal*, speaking in very complimentary terms of our friend and associate editor, Farmer HOLBROOK, of Brattleboro', Vt. The title, "His Excellency," will confer no honor upon him, that he will not reflect back upon the title, by his manly virtues and genuine worth AS A MAN; for in whatever position he has been tried, he has been found true to the convictions which he has avowed. Long and long ago, he undoubtedly might have occupied the Chair of State, had he stooped to "barter" a little for the gilded bait; but if the thought ever occurred to him, it was only to be instantly spurned. But when a common calamity befel us, and political trading gave place to a patriotic enthusiasm, he was first in the hearts of the people, who elected him at once to the highest political position in their gift. He will honor that position, and prove that the State may come to his class more frequently for those who have the ability to secure her interests and extend her renown.

THE NEW GOVERNOR OF VERMONT.

Vermont has honored herself in the choice of her new Governor—Hon. Frederick Holbrook, of Brattleboro'. His election was not brought about by political manœuvering, but was *the people's* spontaneous tribute to true worth and manly honesty of character in one of their own number.

Mr. Holbrook is not far from forty-five years of age; had the ordinary common school and academic advantages in early life; fitted for business with bright prospects which were suddenly darkened by the disastrous failure of the concern in which his father's large property was involved. Thus, in his opening manhood, he was not only thrown upon his own resources, but sorely hampered in the pursuit of any gainful calling.

Left with the care of an aged widowed mother, he undertook the culture of the few acres which were her dower. To the severe labor and thought required to wrest from these a subsistence for his growing family, Vermont, New England, and indeed the agricultural world, owe the advantages they have reaped from his great improvements in agricultural implements, and the numerous valuable articles on practical farming which have made his name widely known.

The improved plows of Ruggles, Nourse & Mason, adapted to every variety of soil and work, are largely the product of his experiments, observation and study, as are many farming implements that bear the names of other men, but owe their existence to his practical and observing mind.

He was one of the founders of the Vermont Agricultural Society, and for the first eight years its President. In that capacity he probably did as much by speech and pen as any man has done to develop the internal resources of the State. It is but just that she should recognize the obligation by this high mark of her confidence.

Governor Holbrook has no taste for politics "as a trade," and has generally avoided political life. In the Vermont Senate, however, he showed marked abilities for legislation. His report upon the subject of an Agricultural Bureau, made to the Senate in 1849, was a paper of marked value; and had not our politicians at Washington been too busy with party measures to act on its wise suggestions, it would now be pouring treasures into the granaries of the country and greatly enriching our farmers.

Gov. Holbrook's recent Inaugural Address is characteristic of the man: modest, simple, terse, direct, patriotic, Christian; its whole tone and spirit show that its author appreciates the importance and bearing of the exigency in which he has been called to bear the responsibilities of office, and that he will prove himself the worthy standard-bearer of a State that now, as of old, is well sustaining her own and the nation's honor, alike at home and in the field.

For the New England Farmer.

NATURAL SCIENCE FOR FARMERS.

MR. EDITOR:—An article in your last number calling attention to the advantage of a knowledge of natural science to farmers, touches the right key, and I hope those farmers' boys and young farmers, who have not already acquired a pretty good knowledge of chemistry, philosophy and botany, will take up at least one of these this winter. The long evenings will afford ample opportunity for an intelligent young man to obtain considerable knowledge of one or two, or even all three of these branches, so intimately connected with practical farming. The "hard words," or "technical terms," which are so apt to frighten the "uninitiated," will quickly disappear when one obtains a little knowledge of their derivation and the reasons for their use.

Aside from its application to the composition of manures, an item of no little consequence in the present state of agriculture, a knowledge of chemistry is almost indispensable in every branch of farm operations. Is it necessary to give medicines to a sick animal, it aids us greatly in exhibiting the nature and probable effect of such medicines; do we wish to preserve the products of the farm, it tells us the nature and process of decomposition, and what is likely to arrest it; it tells us, too, in the operations of the kitchen, what preparations are deleterious or otherwise, and in its application to vegetable growth, it enables us to understand and act in accordance with the laws of growth.

Philosophy, too, must be understood by every farmer who would keep up with his profession, especially if he would reap any advantage from the improved machines and implements which so much facilitate the labors of the farm at the present day, and even if he uses no implement more complicated than a common lever, some knowledge of philosophical principles will often save half the labor otherwise expended.

Both these branches can be pursued to advantage during winter, and so long as man's principal aim is "the pursuit of happiness," it is my firm belief that independent of their practical application to business, any intelligent man would be amply repaid for the time and labor requisite to obtain a knowledge of them, by the insight which

he would thereby obtain into the operations of nature which are daily going on around him.

Botany, although not so appropriate for winter study, and perhaps verging more toward the ornamental, may still come in for a share of attention, now and then; with its principles acquired, no time need be lost in going into the practical part when spring arrives, and while it is a valuable aid to the strictly practical farmer, and well worth the trouble necessary to its acquirement, it is absolutely indispensable to the highest success in horticulture and its kindred branches. While the practical agriculturist, who, through ignorance of its principles, exposes himself to derision if not serious loss, by belief in such doctrines as the transmutation of wheat to chess, the mixing of potatoes in the tubers, &c., the horticulturist and seedsman are liable to serious mistakes at the very foundation of their business, unless a knowledge of botany is included in their education.

But there is another view of the subject which I consider especially important. In every well organized mind, there is more or less love of the beautiful, and this almost exhaustless source of innocent pleasure is more fully brought out and directed to its proper channel, the vegetable creation, by this study, than it can be by any other means and at the same time, the close attention to the minute organs of flowers, required in practical botany, tends to develop the perceptive faculties.

In this, too, it is sufficient compensation for the knowledge-loving student to be able to name the plants and trees which grow along his path, to know their uses and their origin, habits of growth, &c. WILLIAM F. BASSETT.

Ashfield, Dec. 2, 1861.

RYE FOR SHEEP.

Rye is one of the most valuable of the green feed for sheep. A friend of ours, an amateur farmer, who has his means all locked up in real estate, but who is determined to make it pay his expenses in spite of the hard times for all the real estate speculators, enclosed four hundred acres, which he rents out on shares, the most of which has been cultivated in corn since the crash of 1857. Beginning to fear that his third of the corn crop would not pay his taxes on some thousands of acres of wild land, with his other expenses, he applied to his arithmetic, which convinced him that a thousand good mutton sheep would help him out; so after the corn was laid by, he persuaded one of his tenants to allow him to sow some thirty acres of rye among the corn. His thousand sheep were purchased in August, herded wherever he could find feed until the corn was ripe, when they were turned on the young rye, which was their principal feed until the first of June, when it was turned under and planted to corn. A portion of the crop was well fed down, but had it not been for the standing corn stalks, a respectable crop could have been harvested from a part of the field. Here was the large part of the feed of a thousand sheep for eight months, costing $12 for the seed and about the same for labor, and returning the land in far better condition than it was before, no doubt to the extent of the seed and labor. We have never seen a lot of sheep and lambs at this season in so good a condition as this rye fed flock.

The flock is now on the prairie, and will remain there until his meadow is ready to turn into, when the rye pasture will be repeated. He will clear at least $1,500 the first year in this operation, the result of brains in farming.—*Illinois Farmer.*

MANUAL OF AGRICULTURE.

This is a new work on agriculture, especially designed "to supply an important defect in the instruction of youth," but there are few farmers who may not find in it stores of wisdom and pages of facts, a knowledge of which is important to success in their business. It has been prepared by two persons as competent as any in the State to supply such a work, viz:—Mr. GEORGE B. EMERSON, author of a Report on the Trees and Shrubs of Massachusetts, and CHARLES L. FLINT, Secretary of the State Board of Agriculture, and author of a Treatise on Milch Cows and Dairy Farming, and Grasses and Forage Plants, &c. Mr. Emerson prepared the first thirteen chapters, and the twenty-first chapter upon the Rotation of Crops, and Mr. Flint the remainder, commencing with the fourteenth chapter. We have read every page of the work with minute attention, and are free to say that we believe it to be the most valuable work yet published, not only for the "instruction of youth," but for the instruction of our farmers generally. In order to show the nature of the work better than we can show it by any explanation, we will extract a few paragraphs, and begin with the first three in the book.

1. Agriculture is the art of cultivating the earth. It includes whatever is necessary for finding out the nature of the soil, clearing up the land, rendering it healthy, and preparing it for tillage, and plowing it, and the sowing, weeding and harvesting the crops.

2. The object of agriculture should be to enrich the earth, and make it produce the largest crops, of the greatest value, at the least expense of land, time, and labor.

3. In order to attain this object, the husbandman must have capital,—that is, money for the necessary expenditures; labor, or hands for the operations required; knowledge of the best ways of working; and intelligence, in order to direct the application of the capital and labor.

This is sufficient to show the reader the pleasant and familiar style of the work. In clearing the way to speak of the subjects which he must introduce as he advances, Mr. Emerson is obliged to speak of that bugbear word *science*, and he does it in so plain and attractive a manner that all will be charmed, rather than repulsed by it.

"Science," he says, "is exact knowledge, obtained by the observation and experience of many observers."

"You see, then, what is the *use* of a scientific knowledge of the principles of agriculture. It prepares a person for the practice of agriculture."

Mr. Flint, we think, has been equally happy in his portion of the work. The subjects which have come under his care, are concisely and perspicuously treated, and will make a great many points plain, which have heretofore been surrounded with mystery to the common farmer. His chapters on the "Economy of the Farm," and the "Economy of the Household," are especially worthy of the most careful reading.

We not only hope that the book will be introduced into all the schools of New England, but that a copy of it may also be found on the table of every farmer. Messrs. Swan, Brewer & Tileston, 131 Washington St., Boston, are the publishers.

HOW TO CURE HAMS AND SIDES.

There are many ways to cure hams, but some of them are not desirable, unless we are satisfied to eat poor hams in preference to good. A ham well cured, well smoked and well cooked, is a favorite dish with most people, but there are very few indeed who can relish ham which has been hardened and spoiled by salt, or tainted for the want of salt in curing, and may be worse spoiled in cooking; but if ham is spoiled by too much salt, or too little, or becomes tainted before the salt has thoroughly penetrated through it, I defy any cook to make a good dish out of it. I have tried many ways in curing hams, and have lost them sometimes by having them become rancid and tainted in warm weather, and also by having them so salt and hard that they were unpalatable.

I have for some twenty years practiced the following simple recipe in curing pork hams and shoulders, and find it preferable to any recipe I ever tried, and when I have had any to sell they have taken the preference of sugar cured hams with those acquainted with them.

I trim the hams and shoulders in the usual way, except I cut the leg off close up to the ham and shoulder, to have them pack close, and as being worthless smoked; then sprinkle a little fine salt on the bottom of a sweet cask, and pack down the hams and shoulders promiscuously, as they will best pack in, and sprinkle a *little* fine salt on each laying, just enough to make it show white; then heat a kettle of water and put in salt, and stir well until it will bear up a good-sized potato, between the size of a quarter and a half dollar; boil and skim the brine, and pour it on the hams boiling hot, and cover them all over one or two inches deep with the brine, having put a stone on the meat to keep it down. I sometimes use saltpetre, and sometimes do not; consider it useless, except to color the meat. I now use my judgment as to the time to take them out of the brine. If the hams are small, they will cure in three weeks, if large, say five weeks; again, if the meat is packed loose, it will take more brine to cover it, consequently more salt will penetrate the meat in a given time than if it is packed close; on this account it is useless to weigh the meat and salt for the brine, as the meat must be kept covered with the brine, let it take more or less. Leave the casks uncovered until cool. When the hams have been in brine long enough, I take them out and leave them in the cellar, if the weather is not suitable to smoke them. I consider clean corn cobs better for smoking meat than anything I have ever tried, and now use nothing else; continue the smoke until it penetrates the meat, or the skin becomes a dark cherry brown. I then wrap the pieces I wish to keep in paper, any time before the bugs or flies have deposited their eggs on them, and pack them down in casks with dry ashes, in the cellar, where both hams and shoulders will keep as good as when packed, through the summer or year. Cured in this way, it is hard to distinguish between the shoulder and ham when boiled.

A large ham will often taint in the middle before salt or brine will penetrate through.

HOW TO CURE SIDE PORK.

So much for smoked meat; now if any one wishes to have his side pork a little better, and keep better than any he has ever had, let him try my way, and if he is not satisfied, let me know it through the *Ohio Farmer*.

Take out the bone and lean meat along the back, cut and pack the pieces snugly in the barrel, put more salt on the bottom and on each laying of meat than will probably penetrate the meat; then boil and skim the brine (if it is sweet,) and add enough to it to cover your meat two or three inches over the top, made strong like the ham brine; and as soon as you pack your meat, pour the brine on boiling hot; it will penetrate the meat much quicker than cold brine, and give it an improved flavor.

While I was making and pouring the brine on my hams and pork just now packed, I thought the public might be benefited by a knowledge of my way of curing meats. I therefore publish it. Try it.—A. AYLSWORTH, *in Ohio Farmer*.

AN IMPORTANT WORK.—Mr. Kennedy, superintendent of the census, is causing the preparation of a work at his Bureau, which is of the greatest interest. Taking some sets of large maps of States which are in possession of the government, he causes to be written over the spaces designating counties the number of whites, free-colored, slaves, and men between eighteen and forty-five years of age in such counties; also, valuable animals within such limits, as horses, cattle, hogs, sheep, &c. The quantity of leading agricultural products is also noted, and railroads, canals, turnpikes and high roads are accurately delineated, with distances between principal places.

The maps in question are of great military value at this time, and hence Gen. McClellan has detailed several competent persons to make transcripts for the use of the army. Just now the work is confined to States which are seats of war, but it is intended to extend it to all the States, and in the end to have appropriate shadings to represent mineral regions, &c. &c.—*Baltimore Sun.*

THE HORTICULTURIST.—The December number of this popular periodical is before us, and, as usual, elegant in its appearance. It is illustrated by beautifully painted engravings of the "Senior Wrangler," "Diophantus," and "Moor" geraniums. The editor's leader is a continuation of his "Hints on Grape Culture," and is upon the subject of composts and manures.

ON PROTECTING NATIVE GRAPES IN WINTER.

BY PRATIQUER.

It is our duty to profit by experience. The results of the past year have taught a lesson to be improved by vineyardists, as a matter of pleasure as well as profit. Among those who laid down their grape-vines in the fall of 1860, are now, at the fruit-ripening season, to be seen many cheerful countenances, the owners pointing with glowing satisfaction to well-loaded vines, bearing ripe, delicious grapes, produced, as they firmly believe, by their discretion in protecting the vines a year ago, some of whom, I am happy to say, have realized a money value for their products which enales them to say that grape culture is profitable, as well as pleasurable. The protection of vines in this Northern climate is a necessity; they may escape five years out of six, and yet, if the crop is lost once in that time, the grower not only loses his crop, but very often loses his confidence, so that he neglects to prune, cultivate, and train, and perhaps, through carelessness and neglect, loses his crop of future years, and ultimately the cost of his vineyard. When one sees a neglected vineyard, and inquires the reason why it is not cared for, he is often told, "It won't pay." Why not? "Because it is so much trouble to cover the vines in winter." Let us look at this, and see if it is so. The writer, who is an enthusiast on grape culture, desirous to try experiments, lost many of his vines by a neglect to cover them, by leaving them tied to the stakes and trellis, to see what would happen to them, while the other portion, covered with earth, or laid on the ground and covered with leaves and snow, were not only in good order in the spring, but have borne abundantly of good ripe fruit, and have already ripened wood for another season, ripening both fruit and wood many days earlier for their protection. A neighbor, with a large vineyard, producing annually many tons of grapes, covered a part of his vines, which have yielded bountiful crops this season; he has lost, by his estimate, from two to three thousand dollars on those left exposed, the expense of covering which would have amounted to a trifle less than two hundred dollars. Omitting this small expenditure, his unprotected vines have barely paid the expense of cultivating the past summer; indeed, a part of his vineyard has not even been plowed this season, showing that he was discouraged. I could cite many more instances, if necessary, bnt a word to the wise is sufficient. It must be remarked, that the winter of 1860–61 was the severest upon many fruits that has been experienced during the present century, either on this continent or in Europe. The cold was intense for perhaps twenty-four hours at a time, and was preceded and followed by moderate weather, with a clear winter sun. There is good reason to believe that native grapes would bear the severest cold if they were not suddenly exposed to a bright sunshine, after being congealed into solid ice; it may not, therefore, be necessary to bury them in the ground, but it is undoubtedly the most economical mode of protecting them, is found to be effectual in every instance heard of, and is doubtless attended with less trouble than any other method of covering and protecting known. It can be done rapidly; with an hour's practice, a man becomes very expert. First, let the vines be pruned and trimmed ready for tying in the spring; then run a plow two or three times between the rows, near the middle, say about three or feet from the stakes or trellis, and so far from the vines as to lay no roots bare; then let two men work together, one of whom gathers the canes, and holding them together, lays them on the ground lengthwise of the rows, while the other throws two or three shovelfuls of earth to anchor them, and continues to throw on more earth, where needed, until the first is ready with more canes from the next vine. They proceed thus through the row. Returning, they each use the shovel to complete the covering. It may all be done in less time than the two men would dig a row of potatoes. This is much easier and less expensive than covering with straw; besides, straw beds become harboring-places for mice, which often damage the canes when short of food. Another method is to construct hurdles to lay over the vines, but it is both troublesome and costly, except on a small scale. Vines are sometimes well protected by laying on the ground, with stones upon them, to prevent swaying about in the wind. There are some hardy varieties which have withstood the vicissitudes of our climate, and which may be said not to need any protection; but they may live in one location, and be winter-killed in another; or, under varying circumstances, the wood of one may be more perfectly ripened, and thus be able to stand severer tests. *It is better to cover them all*; they are then sure to come out all right, and will bear their fruit three to five days earlier for it, which is an item of great importance, adding more value to the crop than all the labor and expense of protection. In the spring, the canes may be lifted with a garden fork, and allowed to lie on the ground until the proper time for tying to the stake or trellis.

REMARKS.—For several years we have practiced the mode of protecting grape vines in the winter described above, and have invariably found them to come out in the spring appearing more fresh and vigorous than those left upon the trellises or stakes. The labor of laying them is not much, and, compared with the advantages gained, is undoubtedly a profitable labor. When covered, the cultivator should not be in haste to take them up in the spring, as the bark, by being kept moist through the winter, is tender, and is in danger of being injured by a night or two that is colder than is usual in the spring, if followed by hot suns during the succeeding days. We have sometimes let them remain with advantage until the middle of May.

THE BEES AT WAR.—A great battle of bees recently occurred at Conneaut, Ohio. Ezra Dipple had seventy swarms, about equally divided on the east and west sides of his house. On the 17th they went to war, those on the west side of the house being arrayed in battle against those on the other side. They filled the air, covering a space of more than one acre of ground, and fought desperately for three hours—not for "spoils," but for conquest; and while at war, no living thing could exist in the vicinity. They stung a large flock of

Shanghai chickens, nearly all of which died, and persons passing along the roadside were obliged to make haste to avoid their stings. Quiet was not restored until nightfall. Two young swarms were entirely destroyed, and the slain literally covered the ground. Neither party was victorious, and they only ceased from utter prostration. The cause of this bitter outbreak among creatures so redolent of sweetness, is quite unaccountable.

CULTIVATION AND PROPAGATION OF THE PINE TRIBES.

A correspondent of *Hovey's Magazine* writes concerning the propagation of the Pine and Fir tribes, in an article replete with interest, from which we make these extracts:

With respect to the soil and situation best adapted to the Abietinæ, some inference may be drawn from the fact that pine and fir forests are most generally found upon a soil composed of the debris of granite. Hence the prevalence of this family of trees near the summits of high mountains, and over large portions of North America where the different forms of granite distinguish the geological character of the soil. A sandy loam and a cold subsoil seem to be the most favorable conditions for the growth of coniferous trees. Our white pine requires a richer soil than the other American species, and the larch excels all the others in a mean soil. The native habitats of the hemlock are very wet, and often partly submerged in water, yet these conditions are not necessary to it. In fine, there are but few of the conifers that will not do well in almost any soil after they have been successfully transplanted and raised to a growing condition.

The usual method of propagating all the species is by seeds, immense quantities of which are annually collected in different parts of the world, by collectors of Great Britain. It is common with us to transplant the White Pine from the woods; but very few other species will bear this process, unless they were raised from the seeds in a plantation. The most certain and economical mode of obtaining a plantation of conifers is to purchase them from the nurseries. The artificial treatment they have received from the first, under the hand of the cultivator, modifies their nature, so that any species, even the hemlock, may always be successfully removed from the nurseries, under the right circumstances of time and season.

In England, it is no unusual thing to propagate certain species by cuttings; but the pines cannot be treated in this way. Cuttings are taken from the lateral branches when the recent shoots are beginning to ripen; they are planted in sand and covered with a glass. This is usually done on the last of August, or a little later; the cuttings are kept in a frame and protected from the frost, and will be found to have struck their roots on the next May or June.

They may afterwards be transplanted in the autumn. The Silver Fir, the Spruce and the Larch, are found to bear this process well; but the practice is not likely to be followed to any considerable extent in this country. Grafting has also been successfully practiced with several species.

The method of raising by seeds is, however, the most practicable; and in the gathering and planting of seeds a great deal of judgment and experience is required. The cones of some species ripen in one year, in others not until the end of two years. It is advisable to collect the cones a little while before they are perfectly ripe, when they are liable to drop their seeds. In the European trees the seeds usually drop from the cones in March; here the time varies with our latitude and climate, and with the different species.

The cones of the Hemlock are mature in the autumn, when they begin to shed their seeds, continuing to do so all winter; those of the Pitch Pine are mature at the end of the second autumn; those of the White Pine require also two years for their maturity, and ripen in the autumn. Hence the proper time to gather the cones of our native species is during the fall of the leaf.

EXTRACTS AND REPLIES.

DRESSING UP FLAX.

I wish to inquire through the *Farmer*, if there is machinery for getting out flax, either rotted or unrotted, as the raising of flax is profitable, if the cost of dressing it was not so much?

Chelsea, Vt., Dec., 1861. ELI CAMP.

REMARKS.—There is. A cheap process has been discovered whereby flax may be prepared for the "brake" in the course of a few hours,—and then it is run through a machine at the rate of a ton per hour, perhaps, completely separating the fibre from the woody part of the stem. With these facilities for dressing, and the constant demand of the seed for its oil and as feed for cattle, it seems to us that flax-raising might be made profitable on many of our New England lands.

TO PREVENT POSTS BEING THROWN BY FROST.

Last spring there was much complaint about fence posts being thrown out of the ground by the frost, and a request to know what would prevent it. Several things were proposed, such as setting the fence with stone, &c.

There is one thing that I think will prevent it, if not too expensive, which is as follows: Put about a pint of coarse salt around each post, or enough to prevent the ground from freezing, and the post will not be disturbed. There will be another advantage from the salt. The post will last twice as long as without it. It should be put about the post about the first of December each year. The fence between the posts must not rest on the ground. X.

THE WEATHER.

Nov. 28—Thanksgiving.—Weather is fine and moderate; but little snow, not enough for sleighing. Jack Frost, however, has rendered his stay so far serviceable as to pave the ways and by-ways, so that wheeling is very good.

Nov. 29—Morning.—Snowing finely. P. M.—Cloudy and moderate. Two or three inches new snow; enjoyed the first sleigh-ride of the season.

Dec. 1—A. M.—Quite moderate; cloudy. P. M.—Snowing, though damp. Eve.—prospect of sleighing.

Dec. 2—Morn.—Cooler, six inches new snow. A. M.—Cooler still. "Old nor' wester" begins to exhibit itself among the newly laid snow-flakes. P. M.—Wind cold and blowing—later, real March bluster!

Dec. 3—Weather clear and cold, mercury 20° below freezing point. Quite a sudden change. Young winter is really quite *lionish*; hope he may deem it best to exhibit to his subjects more lamblike qualities after he has become more accustomed to his throne, and the novelty of his elevated position has worn away.

Lyndon, Vt. I. W. SANBORN.

—

MILLET SEED FOR HOGS AND HENS.

Will you please state, in your next number, the good qualities of millet for feeding hogs and hens? Will you state how much, per bushel, I should pay in order to feed it to hogs, &c., so as to make a profit above buying meal? G. E. M.

Somerville, Dec., 1861.

REMARKS.—We have never known millet seed fed to hogs or hens. It would, no doubt, be good for either, but what its value is, compared with other grains, we are unable to say.

—

QUERIES ABOUT POULTRY.

I notice that Wm. Robinson, of Watertown, gives us a very good and profitable account of his poultry business. Will he not give us a description of the manner he kept them? Did he keep them cooped? How large a coop he had? What kinds of food he gave them? How he managed his chickens when small, &c.? B. F. T.

South Groton, Dec., 1861.

—

BRONZE TURKEYS.

Can ypu, or some of your readers, inform me where and at what price I can obtain a pair of *full blood* large bronze turkeys?

R. GOODELL.

Antrim, N. H., Dec. 2, 1861.

—

CROPS IN MICHIGAN.

Wheat light, particularly the best quality of white winter. Corn very good. Oats light. Potatoes, a good yield, but rot very bad. Apples and other fruit and vegetables plenty. X.

INFLUENCE OF NEWSPAPERS.—In an article in another column, under this caption, the writer, Doctor SILAS BROWN, states that he is "now over *eighty-two years old*," and yet his manuscript, which now lies before us, is written in a clear, bold hand, and scarcely needs the touch of the pen before sending it to the printer! It is refreshing to receive such interesting facts of the past, clothed in appropriate language, and so plainly recorded. What the Doctor says of Editors we believe to be just. But who make up the newspapers? It is not editors alone,—for, when properly conducted, they must owe a certain portion of their value to the writings of good men who contribute to their columns. In a cheerful, intelligent and vigorous old age, the Doctor's life is illuminated by kind acts and the dissemination of facts and principles which certainly tend to make the world better. We are always glad to see his familiar hand, and send abroad the sound doctrines which he expresses so well.

For the New England Farmer.

THOUGHTS ABOUT SUGAR MAKING.

In perusing your paper of Nov. 1, I was much interested in a piece written by Mr. BASSETT, on sugar making. I well remember, thirty years ago, my father and others made the whitest of sugar, without any trouble, and coals and ashes were continually flying into the kettle.

I have made thousands of pounds of very poor, and also of good sugar. I have came to the conclusion that nine-tenths of the *poor* sugar is made by sourness in buckets and store tubs. Therefore, too much pains cannot be taken; people are apt to think store tubs, washed at the beginning and end of sugaring, is sufficient. But sourness will collect much quicker than in buckets, and they should be cleansed every few days. I admire Mr. Bassett's views in speaking of boiling, cleansing, arch, grate, &c. His heater is new to me—I think it must be a great improvement, and hope to gain by it. He also speaks of a syphon to carry the sap from one pan to the other, with ends turned up. I tried it to my satisfaction in every way and shape, calculating it would keep the sap in the pans on a level; but when the sap boiled hard, it would fill with steam and stop. I also tried to draw sap from the pan while boiling hard, into a pail, with the syphon ends turned up. It would run two or three pails full and stop, therefore I could not place any dependence upon it. So you see in my plan that you published Nov. 24, 1860, the syphons all extended back to the heater, which seldom boils, there being four pans to draw from it. Let every farmer make an estimate of store tubs and a cistern.

First, the sap in store tubs is subject to the warm air, which causes it to sour. Now a cistern, being in the ground, keeps the sap cool like well water, and being covered up, nothing can get into it, except what passes through the strainer. The cost of a cistern to hold 300 pails full is—

1 barrel of cement	$3,50
To drawing sand	1,00
To digging a hole for cistern	75
To mason work, laying	1,50
Tending	1,00
Cost	$7,75

Now add 10 store tubs holding 30 pails full each, which cost here $2,50 each, $25,00. If any one should use the self-acting faucet one season, I think they would not wish to be deprived of it. They cost about twenty-five cents apiece, besides the lead pipe. If you wish to be absent, instead of letting your fire go down so as not to burn up your sap, build as hot a fire as you please, and when you come back you will find your pan full as when left, and boiling well; there is no filling up to do—it takes care of itself. I should prefer an India rubber hose attached to the bottom of the boiler, as I described to you, Nov. 24, 1860, and then hook up at the top, rather than a tin syphon which you must fill with sap, and turn over into the hauler, holding on to both ends with wet

hands. I prefer buckets largest at the top, on account of ice, which we cannot always avoid. People in this vicinity prefer the tin spout; those that have given it a thorough trial, say they can get more sap. I use a half round tapering bit, so I can tap over by taking off a small shaving a dozen times if I wish, and then not exceed five-eighths of an inch. They are manufactured by our blacksmiths. Several have tried the experiment here, and have become satisfied that they can get as much sap from a one-fourth inch hole, as from a three-fourths or one inch hole, as it cuts off the same number of grains. ERASTUS WAY.

West Burke, Vt., Dec., 1861.

WILLOW.

This tree is extensively cultivated in some countries, on account of its rapid growth, and the remarkable facility with which it accommodates itself to almost any modification of climate, and every variety of soil which possesses the capability of nourishing vegetable life. When large and full-grown, it presents a venerable and sombre appearance, being more densely foliaged than any other tree, and of a form often singularly fantastical and picturesque. The timber is not much valued, except when young. It is then wrought by the country people into various kinds of ozier or wicker work, such as baskets, the coverings of demijohns, &c. As fuel, the wood possesses nearly the value of white pine, being light and highly combustible, but possessed of little durability. Like most wood of rapid growth, it soon decays, especially when exposed to the atmosphere. Used for rafters, or other purposes where it is kept continually dry, it has some value, possessing the power of holding nails as firmly, almost, as oak. The weeping willow, around which there cluster in most minds, none but most gloomy associations, is an importation from Europe, where it is said to have been first cultivated by the poet Pope, who discovered a slip of it in a basket or package which had been sent to him from China. Some assert that the ordinary willow, if its position be reversed, will be changed into a weeping willow. The foliage of the willow possesses nutritive properties, and in some countries is gathered the same as corn shucks, and cured as a winter feed for horses and neat stock.

It is to be regretted that a greater degree of attention is not paid to the embellishment of our country residences and villages, by the transplanting of ornamental trees. Nothing adds more to the beauty and desirableness of a dwelling than a plantation, tastefully managed, of ornamental trees. No matter how splendid and elegant in architectural design and finish a dwelling may be, if it stands exposed, unembellished and unprotected by trees and shrubbery, it must ever revolt the eye of taste; there is a nakedness about it which is repulsive, a something which requires filling up. And there is a pleasure in planting which all keenly feel who are not utterly callous to the beautiful in nature. "You can have no idea of the exquisite delights of a planter," says Sir Walter Scott; "he is like a painter laying on his colors,—at every moment he sees his effects coming on. There is no art or occupation comparable to this; it is full of past, present and future enjoyments. I look back to the time when there was not a tree here—only barren heath. I look round, and see thousands of trees growing up, all of which I may say have received my personal attention. I remember, five years ago, looking forward with the most delighted expectation, to this very hour, and as each year has passed, the expectation has gone on increasing. I do the same, now. I anticipate what this plantation, and what that one will be, if I only take care of it, and there is not a spot of which I do not watch the progress."

The time will come when necessity will compel us to accord more attention to this business, and before long, too.

THE LEMON TRADE.

The most delicate varieties of lemons known in the export trade are the Poncine, incomparable, the Naples, the sweet lemon, the Imperial, the Gaeta, the large fruit and the wax lemon. The most delicious, however, are the hot house productions, which are known only in the conservatories of the wealthy. The peculiar nature of the lemon tree, on which may be seen at the same time the blossom and the fruit in all stages of growth, continues the supply through every month of the year, but in greater abundance in the spring. The importations, which continue during the year are largest from January to June, in which month they seem to culminate. The scarcity of the supply at present is variously accounted for, but may be safely attributed to the general interruption to commerce occasioned by the rebellion of the Southern States. The supply in the market is not always governed by the demand, as there are but four houses in New York who import on their own account, all other shipments being made on account and at the risk of producers. It will thus be seen that the trade is of a precarious character, and not likely to tempt investment. The number of boxes brought to this country from September, 1860, to August, 1861, according to the most reliable figures, is, to New York, one hundred and twenty-five thousand; to Boston, thirty-five thousand; to Philadelphia, thirty-one thousand; and to Baltimore, where the season closed earlier than usual, only eight thousand. This is less by fifty thousand boxes than the importations of the previous year. No natural production varies in price so much as lemons, oranges, and Mediterranean fruits. Ten days ago lemons were worth twelve dollars a box, and this week they are six. Last year the price ranged from fifty cents to seven dollars a box. The price is governed by the immediate supply, as they are purchased for immediate consumption.—*Scientific American.*

For the New England Farmer.

COE'S SUPERPHOSPHATE OF LIME.

Having heard and read a great deal about the fertilizing properties of Coe's superphosphate of lime, I determined last spring to make a trial of it myself, and will now give the result.

I bought only one bag, containing 125 pounds, which cost me three dollars, delivered at the farm. The phosphate was applied to corn, potatoes, squash and pumpkin vines, and cabbages. The soil in which the corn was planted is a light loam, of medium depth and quality. About fifteen ox-loads of manure from the barn-yard—a large portion of which was meadow muck, carted in the previous year—was applied to the acre after the land was plowed, and thoroughly harrowed in. I will here state what I have learned from a neighbor the present year; that the cultivator is a much better implement than the harrow, for covering manure spread on the furrow, for it not only covers better, but leaves the ground much lighter. The land was then very lightly furrowed both ways, and the corn planted; nothing being put into the hill except on that portion where the phosphate was used, which was about one-fourth part of the field. On this portion of the field a table spoonful of phosphate was dropped in the hill, and thoroughly mixed with the soil, a pronged hoe being used for the purpose. And here let me say that very many farmers receive no benefit, but much injury, both from the phosphate and guano, simply because they do not take pains to thoroughly mix these fertilizers with the soil. They throw a handful into the hill, kick a little dirt over it, plant the corn on the top, and expect it will grow and flourish in the burning stimulant. The result is, that one-half, or more, of the corn is burnt up, and the other half receives such a powerful dose, that it resembles, all through the season, a person who is always taking physic. At different places through that part of the field where no phosphate was used, and where the nature of the soil is as uniform as possible, four rows were staked off, and the phosphate applied as above. Where the phosphate was used, the corn came up a few days sooner, and until it had nearly attained its full height, was more than a weeks' growth larger, besides being of a much darker green than the other corn. The corn also began to ripen about a week sooner where the lime was applied.

In the hurry of harvesting, I did not ascertain the difference in the yield of corn except in one section of the field. Eight rows through the field—four with the phosphate, and four without, side by side—were reserved, and each of the four rows husked out separately. The rows to which the phosphate was applied, yielded six bushels, one peck and a half of sound ears, and three pecks of unsound ears. The four rows without the phosphate yielded six bushels and one peck of sound ears, and one bushel of unsound ears. To make the trifling difference plain, I will state it thus:

With phosphate...6 bush. 3 half-pecks sound, ½ bush. unsound.
Without " ...6 " 2 " " " 1 " "

So it seems there was only one half peck more of sound ears of corn in the rows where the lime was used, and one peck less of unsound ears; or, with the good and bad together, one-half peck *more* corn in the rows without the phosphate. But the corn was riper, the ears longer, and the kernels larger, where the artificial fertilizer was applied.

Perhaps if I had put another spoonful of phosphate to each hill after the corn was up, the difference would have been greater, and more to the credit of the lime; but as it was, the difference was very small compared with some of the *cracking* stories which I have read concerning the astonishing effects of this fertilizer. To have made the experiment more exact, the corn should have been shelled and weighed, but as it was not sufficiently dry at the time of husking, I did not do it. I raise the eight rowed corn, and a bushel of ears will make a large half bushel of shelled corn.

Perhaps it may be well to mention that a handful of wood ashes were applied to every hill of corn as soon as it was out of the ground, with the exception of seven rows through the centre of the field, and where no phosphate had been used. As the corn increased in height, these seven rows looked like a valley through the field, or like Pharaoh's lean kine; the corn in these rows being very small, and of a light green or yellow color. In the rows next to these, where the ashes had been used, the corn was twice as large, and of a much darker green; and next beyond these, where the phosphate was applied, the corn was twice as large as it was where the ashes had been used separately. This proves that ashes, although not so powerful as the phosphate, yet are of great value to the farmer, if he applies them at the right time. The ashes in this instance were applied immediately after a soaking rain; and this, in my opinion, is the best time to make use of them. At the second hoeing, the ground being quite dry, the same quantity of ashes were put on to each hill in the seven rows, which had been used in the other part of the field; but although it rained soon after, yet the ashes did not seem to have the least effect upon the corn, which continued to have the same sickly or starved appearance through the whole summer—the corn being very light at harvesting.

As nearly all the phosphate which I bought was used upon the corn, I tried it upon only one row of potatoes. A table spoonful was applied to each hill, no manure being used. On each side of this row, the potatoes were planted in the usual manner, with one shovelful of manure to the hill. During the first part of the season, the potatoes planted in the phosphate were larger, and of a darker green, than the plants on each side, but finally were outgrown by the potatoes planted in the manure. When the potatoes were harvested, the result was the following, from two rows, each containing the same number of hills.

Row with phosphate.....1¼ bush. potatoes.
Row without phosphate.....2¼ " "

It seems that there was about a third more potatoes in the row which was manured, and they were larger; but I have no doubt that had the manure and phosphate been used together, the yield of potatoes would have been greater than where the manure was applied separately. The phosphate was also applied in the same manner as above, to cabbages and squash vines, but without any visible effect after the first two months. The phosphate, although powerful at first, seems to lose its force before the season is over, and does not fulfill what it promises to do in the first part of the season; but I may be wrong in this conclusion, as

to its *general* effects upon *all* kinds of land and crops.

I forgot to mention that on that part of the corn-field where the phosphate was used, the crop of pumpkins was more than twice as large, and of a much better quality, than on any other part of the field.

A friend of mine, in North Leominster, used some of Coe's phosphate on part of a mowing field last spring, and the crop of hay was a third heavier than on that portion where none was applied.

I believe that Coe's superphosphate of lime, if rightly used, is a powerful stimulant to plants, and an aid to the farmer; but I also believe that this, or any other artificial fertilizer, can never take the place (and be as beneficial to the land as well as the growing crops,) of animal and vegetable manures, composted together in the barn-cellar, or elsewhere. This kind of food for plants, no farmer can possess too much of, or be too diligent in accumulating and heaping together.

I hope that all who have made experiments with Coe's phosphate, will give the results to the world; for it is only by many different experiments upon all kinds of soil, that a correct estimate of its real merits can be known. S. L. WHITE.

South Groton, Dec., 1861.

THE ESSEX SOCIETY.

We have before us the "Transactions of the Essex Agricultural Society for the year 1861," in a neatly-printed book of 200 pages. It shows as much progress, over its fellows that have preceded it, in the art of printing, as has been made in the cultivation of the soil. The first paper presented is the Address of Mr. ALFRED A. ABBOTT, of South Danvers, and a good one it is. The reports on Plowing with oxen and horses, on Working Oxen, Farm and Draft Horses, on Stallions, Breeding Mares, Colts, Fat Cattle, Bulls, Sheep and Swine and Milch Cows, are all very short, scarcely venturing a remark in regard to any of them, as to their importance to the farmer, or dropping any suggestions that might be valuable to him. The report on Poultry is more at length, and presents facts that are of value to the poultry raiser. The report on the Dairy is brief, but closes with the following capital wish:—"We wish that all of our *young* ladies, while they are learning to play the piano, would also learn to make good butter and cheese. You can please your husband better with ordinary music and sweet butter, than with the sweetest music and rancid butter."

In the brief report on *Pears*, by Mr. JOHN M. IVES, he says,—

Regarding the injury to our fruit trees and grape vines, we apprehend that it took place between the last of February and early in March. The ground was so open in that month that some strawberry beds were forked over and the plants set. On Sunday morning, March 3d, the thermometer, in South Salem, went up to 75° in the shade, and 85° in the sun. On the Thursday following, it was but 10° above nearly the whole day, and upon the 18th, it was only 4° above at sunrise. The Mill Pond was frozen over sufficient for skating.

Such fluctuations of temperature, particularly *thus late*, would, we think, be more disastrous than if they had occurred in December or January. The sudden freezing and thawing of the sap vessels in winter, particularly in the grape vine, causes this trouble; and as the sap is always in motion, at all seasons and under all circumstances, except in the presence of intense cold, as said by that eminent physiologist, Dr. Lyndlay, can we wonder at these results? Biot, a French writer, says that there is a great deal of sap in the spring, and much less at other seasons. He has also proved, by an ingenious apparatus, that the rate of motion of the sap may be measured at all seasons. In mild weather the sap was constantly rising, but when frost was experienced, it flowed back again.

The report on *Flowers* is extended, criticises sharply some bad practices introduced into the exhibition, makes valuable suggestions, and closes with a manly and touching appeal to the farmers of the county, as follows:—

Perhaps our worthy Essex farmers are not yet wholly rid of the idea that raising flowers is "woman's work." So it is; but not the less that of men, by any means. Woman shines in every work of benevolence, but man honors himself in the giving of alms as much as she. Woman is lovely in connection with the education of the young; is not man equally well employed in the same field?

"But," he says, "flowers look charmingly, but have no usefulness; they do no good, that I know of." Suppose it is so; how much good does the carmine do, that you love to see mantling your Red Astracans as well as any one? Is the Baldwin better for its ruby coat, or the Maiden-Blush for the glow that has borrowed it a name from the loveliest of all things? Is the Bartlett more luscious for its gold, or the Tomato for its fine crimson? But the plainest farmer loves all these better for their beautiful hues, and he knows it, and cannot help it, and still those hues have no more of utility about them than the tint or quilling of an Aster. There is just as fine a vein of enjoyment in the farmer's nature as in any man's; nay, he, of all men, is the one to have enjoyment—a full, deep, overflowing cup of it, for his physical system is aptest to be tuned to the true natural harmony, vigorous and strong, and beauty ought to rise on his vision, not in pale, diluted colors, but glorious and warm as a haymaker's sunshine.

Who disbelieves in the culture of a few flowers on the farm, now? If there are any, there is a prospect that they will at some time be given over to hardness of heart. But we must indulge in one more extract—and we know it will gratify many a reader—and thank the gentlemen of the committee before we close:—

The growing of lovely and perfectly formed flowers is as much in harmony with nature as any of the operations of culture. Man is a worker of changes in everything; he has, so to express it,

made the Apple, Peach and Pear; he has *made* the Potato and the dozen of roots that we think so much of; and shall we call him any more a fool because he has doubled the Rose and Chrysanthemum to make them feed more vigorously the hungry life within. Surely not; let the farmer cultivate flowers; let him raise the very best he can, and show them for his own credit, and to excite a generous competition in the hearts of his brethren. They will be like a red cheek on the sunny side of his own mellow harvest; like the bloom on the features of his own home-fed daughters, which enhances and testifies their worth, though it may not cause it. In their mute eloquence, they shall speak to him of a life higher than the mere flitting present; for his full barn and bin only suggest the idea of ever-returning hunger, but these can minister to a want that bread cannot satisfy, hinting still at the painless experience of an immortal rest, from which they seem like lovely premonitors, always murmuring in the ear of him who notes them,

"O, pray believe that angels from those blue dominions,
Brought us in their white laps down, 'twixt their purple pinions."

The report of the committee on *Cranberry Culture* is brief, but very suggestive. That on *Manures* is valuable. It contains the experiments by Mr. RICHARD S. ROGERS, of South Danvers, a portion of which were communicated to the *Farmer*, and published in February last. What he has added, and now appears in these Transactions, we shall copy hereafter.

The report on *Root Crops* is pretty full, and the statement of Mr. H. A. STILES abounds in sound instruction. The report of the Committee *"On the Improvement of Pasture and Waste Lands"* shows in the clearest light the unprofitable condition of such lands, but presents no definite plan for their reclamation. But one instance is cited, that of OLIVER P. KILLAM, of Boxford, who cut bushes, dug out the roots, made holes eight feet in diameter, and put apple trees in them. This will answer very well occasionally—but what we want, as a general thing, is *pasturage*, not orcharding. An excellent report follows on *Forest Trees*, by JEREMIAH SPOFFORD.

The Society voted to build a new barn on the Treadwell Farm, and also to continue to hold their exhibitions in different parts of the county.

The next paper, by WILSON FLAGG, is *"A Plea for the Birds on account of their Utility to Agriculture,"* and is an interesting and valuable paper. Following this is an *"Essay on the Cultivation of Cranberries,"* by NATHAN PAGE, Jr., which is full of excellent facts and suggestions.

Upon the whole, this volume of the Essex Transactions fully sustains the high reputation which that ancient county has gained. The Secretary of the Society, CHARLES P. PRESTON, Esq., of Danvers, is entitled to credit for the promptness with which the volume appears, and to our thanks for the copy which we have examined.

For the New England Farmer.

FINISH UP THE WORK.

Time, with its varied and changing scenes, has brought us almost to the close of another year; this is the season which should be improved by the farmer, and is of almost as much value to him as the month of July. In this month he should improve the opportunity presented him in the warm and pleasant days, to complete whatever of his farm work time may not have allowed him to do before. Let not the fine opportunity, which the open fall and tardy winter has presented, be lost.

If the manure has not all been carted from the yard, do it now, and as fast as it is removed from the yard let its place be filled with muck from your meadows. It will amply reward you for your trouble in grass next year, even if you should encounter a little frost before the job is quite done. And when the snow forbids your longer working the soil, look to the wood-pile,—don't let the females of your household have a chance of complaining about green wood, and not enough of it, either; and don't allow yourself to sit around in the house, and see them bring it from the wood-house, when you have nothing else to do.

The cattle, too, don't forget them, the kind beasts that serve us; don't allow them to suffer for the want of a shelter, or sufficient food to satisfy their appetites, though too lavish feeding is bad; but let them have enough to keep them in good condition and still keep their appetites good. If you have poor hay which you must feed out, do it at the commencement of feeding, and you will find that by cutting it up and putting upon it a quart of meal to each creature, each day, there will be but very little of it lost, and you will scarcely feel the expense at all.

The horses, too, and colts, should be looked after with great care through the cold weather. Do not believe the farmer who tells you that it is better for your colt to take things as they come along, in the rough and tumble style, but look after him; give him a warm stable, and plenty of good hay, a few good carrots and a quart of shorts each day, and perhaps two quarts would not hurt him—if not, give them to him. When all the out-door work is cared for, call upon your neighbor, and examine your accounts for the past year, and, by the way, do not make a day-book of the bellows, or a ledger of the fire-frame—such memorandums are worthless.

Lastly, but not least, don't forget to subscribe for the *N. E. Farmer*, or some other agricultural paper equally as valuable, if you do not now take one, for you will find it a valuable counsellor and guide in your business. Let your evenings, which are now long, be spent in gathering agricultural knowledge from some standard work upon the same, and thereby profit yourself and set a good example before your family. E. P. L.

Ware, Mass., Dec., 1861.

PURE SEEDS.—In our appropriate columns may be found an advertisement of Mr. SANFORD ADAMS, announcing his ability to separate at little cost, all impurities from grain, grass and canary seed. He will, also, shell and clean peanuts for confectioners or family use, and sort beans so that

the number one will all be of the same size, free from all broken ones or spurious seed, and appearing as though they had been through some polishing operation, which they quite likely have. We have seen his machines and found his sifting processes really wonderful. He has brought them to such perfection, and will furnish the means of doing the same so cheaply, that there is no necessity for the farmer, any longer, to sow foul seeds, and thus entail upon himself and posterity a perpetual plague and loss.

What struck us as the most surprising in Mr. Adams' apparatus, is the great simplicity with which he accomplishes so much. He not only separates products of different sizes and shapes, but by the application of screens to fan mills, he does so by their specific gravity.

For the New England Farmer.

PREMIUMS ON STOCK.

MR. EDITOR:—As the "Middlesex Agricultural Society" is an old Society, having been established a long time, must we not expect younger societies of the same kind to look to us for an example? As it respects premiums for stock, have we not been too much like the horse in the cider mill, going the same round, *year after year*? Should we not accomplish more good, if we should leave the old track, and offer three premiums, first, second and third, for the best milch cow, without distinction of breed? Then offer premiums, for the best herd of cattle, not less than six in number. Also, others for not less than four cows and a bull. And still another premium for a herd of cattle, not less than seven in number, of the owner's raising.

In order to make this acceptable to the farmers, suppose we pay to all those who offer a herd, worthy of exhibition, whether successful competitors or not, and who live at a greater distance than five miles from the fair, a travelling fee of two cents per mile, for each one of the cattle offered, for every mile exceeding five from the place of the fair?

I think this would bring a better show of stock to our fair, than we ever yet have had. I make these suggestions, hoping they may meet the eye of the Trustees, before their meeting, that they may have time to think of it, and be ready to adopt, amend, or reject, as they may think best.

ASA G. SHELDON,

Wilmington, Nov. 25, 1861.

WOODEN THINGS.—If Connecticut is not careful, she will lose the palm for inventing and making "wooden things." A farmer in Canada recently lost a fine sow which had twelve sucking pigs, and not caring to lose the pigs, too, he set to work and formed a rough model of a sow in wood, being hollow in the centre, the abdomen being furnished with twelve teats, cleverly formed of rawhide. The interior of the model is kept filled with milk, and the whole of the young pigs suck from the teats of this singular looking wooden sow, and all are thriving well.

For the New England Farmer.

HINTS ON AGRICULTURE.

The rule of every farm, unless in extraordinary situations of fertility, is to expend on it two-thirds of whatever is grown; such a farm cannot be worn out, but, with decent management, is constantly growing better.

Countries which have the largest population, where agriculture is thoroughly practiced, grow more and more productive. Belgium is the most thickly settled country in Europe; it has been cultivated like a garden, for centuries, and its yearly produce is constantly increasing.

There is, doubtless, a limit to the possible production of a farm, but we doubt if it was ever reached; we think sixty bushels of wheat to an acre a great yield, and so it is, compared with our average harvests of ten or fifteen, but it is quite possible, by high culture, to raise one hundred bushels on an acre.

Drilling saves two-thirds of the seed alone, and often increases by one-third the crop; the saving of the seed alone, in one year on a good-sized farm, would pay for the machine.

In broadcast sowing some of the seed is buried too deeply; some lies upon the surface; here it is crowded together; there it is separated too widely. The drill places the seed where it is wanted; the proper depth for wheat is one to two inches.

The time will come when wheat drilled in rows will be cultivated as carefully as corn—with an immense increase in its productiveness.

Wherever land needs manuring, it pays to manure well. Suppose ten dollars' worth of manure on an acre of land gives you a crop worth thirty dollars, and twenty dollars' worth gives you a crop worth only forty dollars, you are still the gainer, and will be for years to come.

A tree planted over the grave of Roger Williams enveloped his skeleton with its roots so completely as to preserve the form of the bones. In some parts of Connecticut there are little family-burying grounds in the orchards, and the trees nearest the graves flourish with a remarkable fertility. We may have scruples about consuming or selling our ancestors in the form of apples and cider, but it is certain that every bone is worth its weight in gold, as a manure. A few bones at the roots of a fruit tree or grape vine will supply it for a dozen years with just the nutriment it requires. The best wheat fields in Europe are its old battle-fields. No man who has a farm or garden should ever sell bones or ashes. Straw is worth more for manure than it ever brings when sold in market.

Our farmers think they do very well to get ten dollars net profit from an acre of land, but it would be a poor acre of garden that did not pay a hundred, and we have orchards that pay a thousand. There are pear trees that have paid a hundred dollars a year for several successive years.

Every dollar of manure on a farm is better than five dollars in any bank, or stock, that we know of. It is a good stock that pays ten per cent. It must be a badly managed farm where a deposit of manure will not pay three hundred per cent.

We need model farms and agricultural schools; but where these important institutions are wanted it would not be a bad plan to spend a day or two with those eccentric but very benevolent people and admirable farmers, the Shakers.

In a Shaker community, you have the material below the general average; but made the most of in certain directions. Agriculture and domestic manufactures, carried out thoroughly, with the most important objects, temperance and frugality, will make them rich.

In England, farmers prefer to lease farms rather than buy them. They prefer to expend their capital in stock, manure and labor, rather than shut it up in the land. But the man who wants a home for his family and his posterity, must own the land he cultivates, and then every acre he drains, every tree he plants, every load of manure he plows into it, will add to its permanent riches.

At the creation, man's appointed work was the cultivation of the earth, and there are many whose talents are inferior in this respect. I think it will be so until all the other works are subordinate to this. Canals are dug, railroads are constructed, cities are builded, warehouses, manufactories and ships are all constructed for the sole purpose of benefiting the lords and cultivators of the soil. All the pursuits of civilization rest upon this one. Perfect independence is impossible, but the old-fashioned farmer, who is able to produce for himself all the real necessaries, comes very near to it.

A bed of muck or marl on a farm is better than a gold mine, in a long run: when the gold is exhausted, that is the end of it; but the enriched farm will pour out crops for a century.

When a fruit tree has exhausted its fruit-forming material, it must stop bearing. Try a load of muck or ashes, bone dust, &c., dug in from six to twelve feet from the trunk, and you will be satisfied.

Every dead animal on a farm which is not eaten as food, should be stored with loam, rotten leaves, old plaster, powdered charcoal, leached ashes, or other absorbents, so as to make a compost of manure that will be worth, in the long run, more than it would have sold for when living.

The science of agriculture is to know how to convert the waste and apparently valueless matters around us into the richest and most important production of life. The business of the farmer is one of the greatest dignity. It is to assist the Almighty in His work of creation. It is to increase the beauty and fertility of the earth.

North Charleston, N. H. H. B.

GREAT EXPEDITION.

Our readers will perceive by the new railroad schedules published to-day that, actuated by a public spirit which gives them fresh claim to the grateful consideration of the entire community, the several railroad companies on the seaboard line have united in adopting a rate of speed on their respective roads which actually reduces the time of travel between Washington and Boston within *twenty hours!* Thus, a person leaving Boston at 2 P. M., arrives at Washington at 9½ o'clock next morning. We have heard of an ancient personage who, in the fervor of faith, said he believed a certain dogma because it was impossible; but here is an achievement in transportation which we can scarcely believe, although it is proved to be possible. We remember hearing a gentleman of this city, many years ago, before the happy introduction of railways, relate how, on entering the hall of the Exchange Hotel, in Boston, one evening, and stating that he had left Washington *five days* before —travelling by stage and steamboat—he was listened to with some incredulity. Was it possible; only five days from Washington to Boston? What was the world coming to? And now ——. Has any man ever tried seriously to estimate the debt of gratitude which the world owes to the public spirit that has blessed it with railroads? Not in comfort alone to the traveller, or even in their incalculable benefits to commerce, but in the saving of precious time. It is only those who are aged enough to have been trundled and jolted along three miles an hour, in the former old vehicles of travel, that can begin to appreciate the blessings of railroads.—*National Intelligencer.*

A TIGER KILLED BY BABOONS.

The following account of a tiger chase is extracted from the *North Lincoln Sphynx*, a regimental paper published at Graham's town, Cape of Good Hope. The writer, after alluding to his sporting experience of all kinds and in all quarters of the globe, declares that he never witnessed so novel or intensely interesting a chase as that about to be described:

"Not long ago I spent a few days at Fort Brown, a small military post on the banks of the Great Fish river, where my friend W. was stationed. One evening, as my friend and I were returning home after a somewhat fatiguing day's buck-shooting, we were startled by hearing the most extraordinary noises not far from us. It seemed as if all the demons in the infernal regions had been unchained, and were amusing themselves by trying to frighten us poor mortals by their horrid yelling. We stood in breathless expectation, not knowing what could possibly be the cause of this diabolical row, with all sorts of strange conjectures flashing across our minds.

Nearer and nearer the yelling and screaming approached, and presently the cause became visible to our astonished eyes. Some three or four hundred yards to our right, upon the brow of a small hill, a spotted leopard (commonly called in this country a tiger, though much smaller than the lord of the Indian jungles,) came in view, bounding along with all the energy of despair, while close behind him followed an enormous pack of baboons, from whose throats proceeded the demoniacal sounds that had a few seconds before so startled us. Our excitement in the chase, as you may suppose, was intense. On went the tiger, making for the river, the baboons following like avenging demons, and evidently gaining ground upon their exhausted foe, though their exultant yells seemed each moment to increase his terror and speed. They reached the stream, the tiger still in advance, and with a tremendous bound he cast himself into its muddy waters and made for the opposite bank. The next moment his pursuers, in admirable confusion, were struggling after him, and as the tiger, now fearfully exhausted, clambered on the land again, the largest and strongest of the baboons were close at his heels, though many of the pack, (the old, the very young and weakly,) were still struggling in the water.

In a few moments all had passed from our sight

behind the brow of the opposite bank; but their increased yelling, now stationary behind the hill, told us that the tiger had met his doom, and that their strong arms and jaws were tearing him limb from limb. As the evening was far advanced, and we were still some miles from home, we did not cross the river to be in at the death; but next morning, a few bones and scattered fragments of flesh and skin showed what had been the tiger's fate. On our return home we were told by some Dutch gentlemen that such hunts are not uncommon when a tiger is rash enough to attack the young baboons, which often happens. All these creatures for miles around assemble and pursue their enemy with relentless fury to his death. Sometimes the chase lasts for days; but it invariably closes with the destruction of the tiger—a striking instance that the idea of retributive justice is not confined to man alone."

For the New England Farmer.

IS FARMING PROFITABLE?

This question has been so often asked and answered, that perhaps your readers will turn away from this article in disgust. But I do not think the subject is yet exhausted. Other men than farmers are entitled to have an opinion respecting it. Any man of common intelligence, especially if he is acquainted with the general condition of farmers, and the details of farm life, may form as correct an opinion on the subject as the farmer himself. By the term "profit," perhaps, we are apt to refer too exclusively to pecuniary results. The great pursuit of man is said to be happiness. But is it wise to measure the amount of happiness by the amount of money which men acquire?

Do observation and experience prove that the former is necessarily or uniformly in proportion to the latter? Although a certain amount of wealth undoubtedly contributes to our happiness, yet other elements must be taken into the account. Health, longevity and independence, certainty, freedom from exhausting care and anxiety, and various other circumstances must be considered in estimating the profitableness of any business. In the first place, I think it will not be doubted that farmers, as a body, enjoy a greater measure of health than any other class of men. They are stronger and more robust, and retain their strength and vigor to a greater age than other men. They live longer on an average than any other class of men, which proves not only that their course of life is conducive to health, but that their labor is of a less exhausting character. Labor in the open air is always more healthy than labor in the shop, the counting-room or the study. Many other men who live and labor in the open air, as the hunter and the sailor, are subject to greater vicissitudes, exposures and dangers than the farmer, which often exhaust their health and cut short their lives. The circumstances under which the farmer labors in the spring, the songs of the birds, the fragrance and beauty of the flowers, the vigorous growth of the spring crops, and in the summer and autumn, the consciousness that he is reaping the reward of his labor, all tend to promote cheerfulness, hope and satisfaction.

The farmer's life is more uniform than that of most other men, and when the labors of the day are ended, he sleeps quietly in his bed, secure from danger and the inclemencies of the weather. He is not subject, like the traveller and the sailor, to changes of climate and temperature. He is accustomed to the climate in which he lives. His diet is plain and substantial. It is rare that he is required to make unusual efforts, or, like the soldier on the march or in battle, to make extraordinary drafts upon his strength and powers of endurance. Hence, as might be expected, statistics show that the farmer lives to a greater age than most other men.

Farming is safer than any other business. The navigator, the fisherman, the trader pay large sums for insurance. Indeed, so great are their risks that they cannot afford to carry on their business without insurance. But the farmer can afford to be his own underwriter. With reasonable skill and diligence, he is sure of the ordinary results of his business. It has been stated, on good authority, that ninety out of a hundred who engage in trade in our cities fail in their business. On the the other hand, observing farmers have estimated that not more than five per cent. of those engaged in farming ever fail. Many of our young men enter upon the business of farming heavily in debt. If they take the homestead, they have to pay legacies to their brothers and sisters. If they purchase a farm, they pay a part, and take the balance on credit. Yet in most cases they work out of debt, and in a few years own their farms free of incumbrance. Is not here sufficient proof of the safety and certainty of the business of farming?

I am acquainted with a farmer less than forty years old, who is very apt to complain of the unprofitableness of farming. Now let us look at the facts in his case.

He inherited less than $2000, and married a wife who had about $2000. He purchased a farm for $2000. Built a house which cost, say $1800. Built a barn which cost as much more. Here was an outlay of $5,600. He has now his house well furnished, 16 cows worth $25 each, a yoke of oxen worth $100, two horses worth $100, a carriage worth $100, a good stock of wagons, carts and other farm implements, worth say $300—making his farm stock worth $1000. He has dug ditches, laid walls, reclaimed swamp lands, and in various ways improved his farm, until it is now worth, say $8000. He has paid his debts and is now free from incumbrance. Here is a man who has doubled the value of his property, has an excellent wife and four promising children—has maintained himself and his family well—has a permanent business, knows the capabilities of his farm, and is annually increasing his products. He has become skilful in his business, has good health, and the respect and confidence of his neighbors, and he is not yet forty years old! Has not this man's business been profitable? And when he compares the results he has achieved with those achieved by men in other vocations around him, has he any reason to grumble at his want of success?

The farmer is more independent of fashion than others. He can live and dress as he pleases, while the minister, the doctor, the lawyer and the merchant must dress and live in a more expensive manner, or they will at once lose caste in the community. They must expend more money in visiting and receiving company, in travelling, in sus-

taining societies, lectures and other institutions of the day, in books, furniture and in various other ways, in obedience to the demands of custom.

Let us compare the results of farming with the results of other vocations in our own community. Our town has been settled more than two hundred years; upon inquiry, I can hear of but one physician who became wealthy by his profession during that period, and yet we have had many men of learning and talents who have worked thirty or forty years harder than any farmer among us—have been more exposed by day and night to the inclemency of the weather—have lost more sleep and undergone more anxiety. We have now an intelligent physician who has labored more than forty years most indefatigably among us. His labors have been most abundant by day and night, in season and out of season—and he has the confidence of the community to as great a degree as any man in the State.

Has his business been more profitable to him, in a pecuniary view, than that of many of our farmers? How is it with physicians of our acquaintance in other towns? Have they grown rich by their profession? How is it in our cities? A few, eminent by talent, or peculiarly favored by fortune, have grown wealthy by their professional labors, But not more than one in ten does more than gain a comfortable livelihood. We must judge, not by exceptional cases but by average results. Who ever heard of a New England clergyman becoming rich by his salary? In former times, when clergymen were settled for life, many of them owned small farms, and labored with their hands to eke out their salaries. As these farms were generally situated in villages, some of them realized profit from the increased value of their lands. Some have married wealth. But I have yet to hear of a clergyman who has grown even moderately wealthy, by his profession alone.

A few men of superior talents do most of the legal business. Some of these grow rich by their professional business alone. But is it so with the majority of our lawyers? Are not most of them eager to engage in extra professional business? They become agents of corporations. They seek public offices. They engage in speculations. Some of them even become farmers. Probably not more than ten per cent. of them become wealthy by their profession. Most mechanics work early and late. They generally obtain a comfortable living. Some accumulate property by extraordinary skill or diligence, but I think they do not in general exceed farmers in this respect.

The manufacturer sometimes acquires wealth for a time with great rapidity. But lo! there comes a change. The kind of goods which he is making goes out of fashion; the raw material rises in value. Some new machine is invented which will produce the same goods at a much cheaper rate, and in order to sustain himself, he must have an entire new set of machinery. The tariff is changed, and foreign goods undersell him. If he did not make money rapidly between the crises that so frequently occur, he could not carry on his business at all. When business is good, he must put on all his force, and drive day and night. Now think of the care and anxiety to which he is subject. And the operatives—how often are they thrown out of work, and left in an anxious and starving condition? What farmer who owns his hundred acres, with comfortable buildings and a decent stock of cattle, would exchange situations with the employer or employed in manufacturing life?

Farming, then, tends to promote health and longevity. It is a safe and certain business when compared with any other vocation, and its pecuniary results compare favorably with the results of and other business. All these elements should be taken into estimation in making up the profit and loss account. Should not the farmer, then, be contented with his lot? J. R.

Concord, Dec. 17, 1861.

For the New England Farmer.

SALTING AND PRESERVING HAMS AND BEEF.

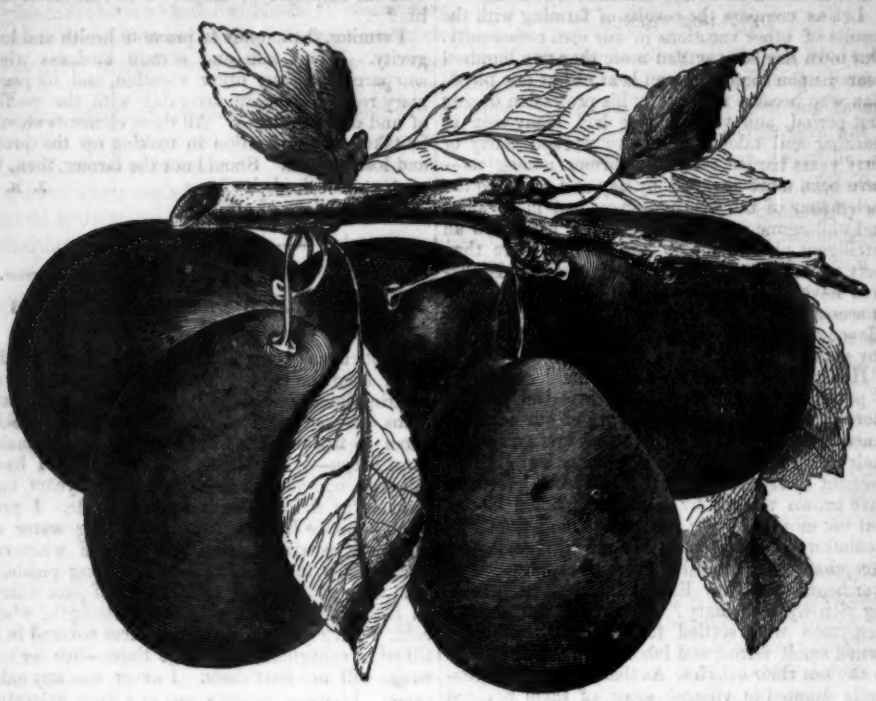
I notice an article in the *N. E. Farmer* of the 14th, from the *Ohio Farmer*, on the subject of "Curing hams and sides." It appears to me that hams covered with salt, and in a strong pickle three to five weeks, would be too salt to make good bacon—it would not suit my taste. I have followed one method more than thirty years, and have never failed to have a good article. I prepare a pickle by dissolving in boiling water as much salt as will dissolve, and skim off whatever rises on the top. This purified, strong pickle, I reduce by adding an equal quantity of pure water. In this reduced pickle of half full strength, when cold, I put my hams, and keep them covered in it till it is convenient to smoke them—five or ten weeks will not hurt them. I never use any saltpetre. I have sometimes put in a little saleratus to correct any acid there may be in pork or pickle, and I think it makes the bacon tender. I use corn cobs to smoke it. Sometimes when I wanted to give more flavor to bacon, I have prepared a liquor with brown sugar in it, and such spices as I wished—pounded cloves, spice, pepper, (cayenne,) &c., and after taking the hams from the pickle and draining them, kept them basted in this liquor a week or two before smoking.

I also put down my beef in a similar pickle. I put my beef into a barrel, and then prepare the pickle as for bacon, but pour it on the beef boiling hot. It will keep well till April or May, and then it should be repacked in stronger pickle. I keep the barrel in a cold room above ground. It will be good corned beef till the middle of April, or longer, and as salt as I want to have beef. Saltpetre would give it color and make it harder, but beef is always hard enough for me, and I have an impression that saltpetre does not add to its healthfulness. Some saleratus would not hurt it, but make it tender. I have preserved my beef in this way for at least thirty years, and have never had any injured for want of salt. All who have eaten our beef and bacon call it first rate. Some would prefer to have it a little salter, perhaps—not much.

RUFUS MCINTIRE.

Parsonsfield, Me., Dec., 1861.

REMARKS.—From our own experience in preserving meats, we believe the process stated by Mr. McIntire is an excellent one—and one that will secure juicy, sweet and tender meat in all cases where the meat itself is good.



VANDINE'S SEEDLING PLUM.

Downing says "that the soil and climate of the Middle States are admirably suited to this fruit is sufficiently proved by the almost spontaneous production of such varieties as the Washington, Jefferson, Lawrence's Favorite, &c.; sorts which equal or surpass in beauty or flavor the most celebrated plums of France or England." For several years past the cultivator of the plum has been discouraged by the destruction occasioned by the curculio, and what is still worse, the black knot, caused either by this insect or by some widely-spread disease among the trees. No sufficient remedy has yet been found for either of these pests. The ravages of the curculio may be prevented by a frequent jarring off of the insects upon cloths and killing them, but the labor must be a protracted and tedious one. The plum, however, is a delicious dessert fruit, is excellent for sauces and preserves, and is worthy of considerable effort to bring it to perfection.

The cluster of plums which is so beautifully figured above, was presented to us by Mr. HENRY VANDINE, of Cambridgeport, Mass., and had a flavor as excellent as the cluster was beautiful. A few days since he sent us the following note in relation to it:

Cambridgeport, Dec. 20, 1861.

MESSRS. NOURSE, EATON & TOLMAN:—Dear Sirs,—I have received your letter requesting a description of the Vandine Seedling Plum. It originated on my place several years ago. It is about the size of the Diamond Plum, of a black color, with a heavy blue bloom. It ripens about the last of August, and is of an excellent quality when fully ripe. Yours, respectfully,

HENRY VANDINE.

RATS AFRAID OF POWDER.—H. H. Ballard, Owen Co., Ky., writes to the *American Agriculturist* that with one-quarter of a pound of gunpowder he can keep every rat from his premises for a year. "The powder is not used to drive a bullet or shot through the animal, but is simply burned in small quantities, say a teaspoonful in a place, along their usual paths, and at the holes where they come out, with the proper precaution to prevent accidents from fire." He says he has proved its efficacy by repeated trials. The rat has a keen sense of smell, and if he has sense enough to know that he is not wanted, when he perceives the odor of the burnt powder, the remedy will be of great value.

For the New England Farmer.

THE WAR AND THE FARMER.

BY JUDGE FRENCH.

We have now, in the ranks of our army, fighting for the Constitution and laws of the best government and most prosperous people upon which the sun ever shone, more than half a million of men, all volunteers, nearly all men who, a few months ago, were engaged in the peaceful avocations of productive industry, either in the workshop or on the farm. A half-million of industrious men, suddenly called from laboring to produce food and clothing, into a profession which produces not an ear of corn nor a yard of cloth! More than this, even! for another large army of men, with horses and machinery of all kinds, are away from their accustomed pursuits, devoting their labor to constructing fortifications, to building ships of war, to manufacturing guns, and swords, and all warlike implements. All these men are consuming the necessaries of life, and producing nothing, and worse than this, because what they consume is charged with the cost of freight away from the place of production, and of necessity, a considerable proportion is lost or wastefully consumed. Looking at these facts, which lie upon the very surface, many are inquiring anxiously as to the future. How can the loyal States spare so many industrious men, and who is to perform their accustomed labor at home?

No philosopher or statesman ever yet succeeded in adjusting these questions relating to supply and demand, especially if the matter of tariffs and free trade were involved, so that his theories and facts would correspond, and we shall not attempt what wiser men have failed to accomplish. Yet there are some facts and considerations worthy our attention, in connection with the question whether we can spare so much labor without suffering, and even famine?

This is generally thought to be rather a hard world to live in, and we in New England being duly impressed with the Scripture idea that labor and bread are pretty closely allied, have most of us an impression that it is everybody's duty to work all the time, to keep the world revolving. Now, this is a great mistake; we are laboring, many of us, for that which is not bread, in any sense, and it is by no means necessary for all the world to work, that all the world should be comfortably provided for. We know it is not, if we look Southward, where we see every negro, great and small, supporting himself, and a white man or two besides! and everybody knows that one Northern farmer does more effective work than three slaves. Read what Dr. Paley says of the real necessity for labor in England, and it will be seen that an industrious people can spare for war, or any other extraordinary occasion, a far larger proportion of its active laborers than we have yet sent away. It should be borne in mind, that only about one-tenth the population of England is engaged in agriculture, the great majority being engaged in manufactures.

"Perhaps," says he, "two-thirds of the manufacturers in England are employed upon articles of confessed luxury, ornament or splendor, in the superfluous embellishment of some articles which are useful in their kind, or upon others which have no conceivable use or value, but what is founded in caprice or fashion."

Now it is obvious, that England would be none the poorer, if it should, for five years, dispense with all those articles of luxury, and support the two-thirds of her manufacturers, who are fit for soldiers, in her armies. They might as well be soldiers, as to weave laces or ribbons. It would cost the nation no more to support such weavers, with guns on their shoulders, than at their looms, if those who formerly bought the laces and ribbons, would go without them, and pay the same amount towards the war.

In America, a far less proportion of labor is devoted to luxuries, than in England, but still it is true that we can spare a very large force for the war, and yet have enough to provide food and clothing, and all other comforts of life for us all. We can all economize as individuals, and so spare something for the soldiers. The imports of dry goods into the city of New York alone, are fifty-five millions less up to December of this year, than in the same time last year. A great part of this saving is by dispensing with mere articles of fancy, by the women of the country. What harm comes to anybody if the ladies who formerly did nothing in their leisure hours, or worked worsted, which is the next thing to it, now knit a half-million pairs of socks and mittens? Is not so much useful labor created by the war?

We have in fact had a surplus of labor on our farms, as a whole, for some years past. More Indian corn has been raised in many parts of the West, than could be properly or profitably used. So abundant and cheap has it been in some localities, that it has been burned for fuel, which is a public loss, for the fresh productive soil has been thus needlessly sapped in its production. And now, with no extraordinary crop the past season, we have enough for ourselves, with our vast armies, enough to supply the demands of France and England, and, thank God, something to give to starving Ireland when she wants help again, as she probably will, the coming winter.

We have it stated on the authority of Pashley, that there were in England, in 1850, 300,000 able bodied male paupers! and that the amount levied for poor rates in that country, was about $36,000,-

000 in the same year. Yet England is a great and prosperous nation. We have no able bodied male paupers, but are we not vastly more able, for that very reason, to send an army into the field, and to maintain it there? Less than 50,000 persons in England are classed as landed proprietors, while here, except in cities, everybody owns land.

This diffusion of property is the secret of the ability of every one to take care of himself. The famine of 1846 and 1847, in Ireland, was the result of the poverty of the people, rather than the scarcity of food. There was abundance of food in Great Britain, and ship-loads ready to go to her ports, but the people had no means wherewith to buy food, and so they perished by actual starvation, while the granaries of capitalists and wealthy land-holders were filled to overflowing. Before a sheaf of wheat was cut, in 1847, flour and meal became a drug in the English market, and many dealers were ruined by the sudden reduction in prices. We have no means of knowing the surplus of our crops this year, but as yet, they give no signs of exhaustion. A few cents advance in price will enable those who have lost or wastefully consumed their wheat and corn, to bring it into market. The increased demand will open new facilities for transportation, and stimulate those who remain at home to increased exertion. Labor will be directed more exclusively to the production of articles of necessity, and patriotism and self-interest will both call upon all to sacrifice something at least of our usual luxuries at home, for the comfort of our brave sons and brothers, who are so nobly maintaining our rights in the field.

We have no cause for discouragement. Republicanism, with her equal distribution of land and of privileges, is exhibiting a sublime spectacle before the world to-day, such as kings and potentates have never before beheld, and will never see in their own kingdoms—an army of more than 500,000 freemen volunteering to fight for their country, with abundance at home, supplying the markets of the world with bread, while its Congress in the first week of its session is considering the expediency of sending relief to the homes of the brave Irishmen who have rallied so readily to the standard of their adopted country.

CHEMICAL EXPERIMENTS WITH THE WHEAT CROP.—From some recent and careful experiments with wheat, on English soil, a British chemist asserts that, reckoning the soil to be one foot deep, it would require, of ordinary rotation with home manuring and selling only corn and meat, about one thousand years to exhaust as much phosphoric acid, about two thousand years to exhaust as much potash, and about six thousand years to exhaust as much silica, as, according to the average results of forty-two analyses relating to fourteen soils of very various descriptions had been found to be soluble in dilute hydrochloric acid.

For the New England Farmer.

THE PATRIOTIC FARMER'S MUSINGS.

BY D. W. L.

Farmer Stubbs in his furrow trod pensive along,
While the hills were all echoing melodious song;
Uncle Sam had just bargained for Tim and for Dave,
And given them muskets the Union to save.
"Get along, Buck and Bright," and he hit them a slap,
"Out of this, boys, now, forward, kedap!"

"King Cotton, the tyrant, with lash in his hand,
May rule his slave minions of half-heathen land;
But men of New England—they born of the rocks—
Will square off and give him a few solid knocks.
Now, stir up, my Buckeyes, you're taking your nap;
Away with the old plow, but steady, kedap.

"The Union's a bargain for better or worse,
But broken at will, a political curse;
The voice of her people must questions decide,
And ever remain the Republican's pride.
So move along, Buckeyes—'twill be no mishap;
And both pull together, now—steady, kedap.

"There's honest Abe Lincoln, a man for the times,
Who fences off slavedom in well-defined lines,
And holds up our flag with a firm, steady hand,
Resolved it shall wave o'er a united land.
Bear away, now, my darlings, or I'll hit you a tap;
Haw Brigh' and White-Face, come around here, kedap.

"But men of the South, do not boast of your strength,
For the cause of mankind can but triumph at length;
And know ye, proud rebels, whose cause is so black,
With their hands to the plow, Yankees never look back.
So push along, Buckeyes, or you'll get a slap;
Don't play the secesh, now, but forward, kedap.

"And men of the North, from the field and the shop,
Whose young blood is pledged to the very last drop,
Let all the world know, in a quarrel so just,
You'll crush out rebellion or sink into dust.
Then root out the stubble, and make the plow snap—
A Yankee's behind ye, old sojers, kedap."

West Medford, Dec., 1861.

For the New England Farmer.

CORRESPONDENCE FROM MAINE.

First Snow—Sheep Manure—Sheep for Mutton and Wool—Profits of Sheep—Matching Steers.

SNOW fell so as to make quite good sleighing, November 24, throughout the northern part of the State. The ground was frozen but little in any place, and the frost has mostly come out since it has been so mild; had it not snowed repeatedly since, the ground would have been bare again. This has given sheep a longer grazing fall than we are always sure of, which is quite an item in the fodder designed for them.

SHEEP MANIA.—This year brings round another cycle of this disease, and the cry is sheep! *sheep!* have you any sheep to sell, or lambs to let? Since wool advanced in prices, nearly every one wants more sheep to keep, and are eager for them at much higher prices than for years previous. Store sheep and lambs are quick at two and one-half to three cents per pound, live weight, which is a high figure with us. Speculators are letting sheep for one pound and a half of wool, per head, and the taker bears all the risk, and pays the taxes—so I have been informed.

It is very generally calculated here that sheep pay the best of any stock for their keeping, upon the amount invested, and the necessary labor re-

quired. Many of the improved breeds are being introduced; some sections taking those best for wool, and others those for mutton, but generally, they are crossed upon those which have been here long enough to be called natives; often, first fine wool and then coarse wool, very much as is most convenient, with the mass of sheep-keepers; nearly every farmer keeping a few sheep, and thinking it will not pay to be to so much expense as to get rams of their choice.

MATCHING STEERS.—The farmers have manifested quite a laudable spirit of improvement over any previous year, in matching up their steers when intending to keep them; and, often it has been found a good investment to pay the fair difference when designed for sale. Matched one, two, three or four year old steers are in greater demand than the market can supply; and this demand is yearly increasing. This seems as it should be, because it costs but a trifle more to raise them, than it does those illy mated, while they command a more renumerative price, which is often all that there is in the way of profit. Mate up the steers.

Elm Tree Farm, Dec., 1861. O. W. TRUE.

For the New England Farmer.

TESTIMONY IN FAVOR OF FARMING.

Opinions of an Aged Farmer—Stick to the Homestead—Work with One's Own Hands—Cattle Report in N. E. Farmer—Receipt for making Brown Bread.

MR. EDITOR:—I have passed the period allotted to man's existence in the present life, but my interest in the success of agriculture increases with my years, and I wish to leave my dying testimony of its worth. Should these lines meet the eye of any young man who is struggling under difficulties upon the paternal inheritance, I would exhort him to stay and overcome all obstacles that patience and perseverance can surmount, and, my experience for it, in his maturer years, he will look back with pleasure upon his past life, and peace and plenty shall crown his declining years.

I would recommend to all who wish to have the full enjoyment of agricultural life, to labor some with their own hands. There are but few who cannot obtain some land to work upon, if they wish.

One word in recommendation of the *New England Farmer*. There has been much said and written about agricultural colleges, but I think the *Farmer* is one already established, and endowed with some of the best professors that this country and Europe afford, to which all may have access at a trifling expense. *The report of the Cattle Market for the past few weeks, is worth the whole price of the paper to all those who have any dealings in stock.*

I think my housekeeper makes the best brown bread I have ever tasted; the following is a receipt for making it. To six tea-cupfuls of Indian, and three of rye meal, one table-spoon level full of bread soda, one tea-cupful of molasses, and sour milk sufficient to wet it to the same consistence as brown bread, where the Indian is scalded. A loaf of this size would require a dish which would hold three quarts. Cover the dish and place it on an iron ring in a large iron pot, and cook by steaming four hours, and then bake fifteen or twenty minutes. If steamed a longer time, it is rather improved. THOMAS HASKELL.

West Gloucester, Dec. 14, 1861.

CULTURE OF THE GRAPE.

We have before us the December number of *Hovey's Magazine*, and among other good articles, we find a leading one, by the editor, upon the "Culture of the Grape." After speaking of the late favorable season, and of the merits of several varieties, he says:

Having thus given our estimate of the several varieties which have been introduced somewhat generally, as they have appeared, more particularly the present year, we proceed to inquire into the causes which have produced this favorable result, deducing therefrom a lesson which may aid us in the more successful culture of the grape.

If we follow the course of the weather for the summer, we shall find it has been dry, warm, and very free from long or continued dull or even damp weather, and beyond the remembrance of cultivators extended further into the autumn—the first frost having occurred late in October. Hence the well grown grapes had time to fully mature, aided as they were by continuous sunshine. How shall we then avoid failure in ordinary years, when we can hardly expect such as the present one to occur often?

First, then, we can to some extent imitate its dryness, by planting only in light, sandy, thoroughly drained soil, avoiding by all means a hard, damp, stiff loam, as sure to keep up a late growth, so that winter finds the wood immature, and the dormant fruit buds unable to resist the effects of cold if unprotected, and liable to danger when covered with earth. In France the vineyards always cover the hillsides or elevated grounds,—rarely the valleys or plains,—for the obvious reasons that the roots are kept dry, the late growth checked, and the wood fully matured.

It will be inferred from this that nothing could be more injurious in grape culture than to make the soil too deep and rich; rich it may be upon the surface, but not too deep, and always with a dry bottom. The summer and autumn rains will then leave the surface readily, the soil will be indiately warmed by the sun and air, and mildew, so fatal to the vines, will be prevented, or at least, greatly mitigated. Indeed, good sound judgment will dictate that cautionary measures of this kind should be taken wherever the grape is to be extensively and successfully grown.

Secondly; though we have not the power to bring sunshine to the vines, we can, by favorableness of locality, prevent the ill effects which often ensue from long continued wet weather. Near the seacoast, where the easterly storms prevail, an aspect, sheltered in that direction should be chosen, say one facing the south or west, or if in the open garden, near the shelter of evergreen trees or hedges. The direct action of a cold, easterly storm is far different from the sifted atmosphere of a fence or hedge. Hence the greater certainty of a crop when the vines are trained to the south side of a house, where they are sheltered from the chilly blasts and pelting rains of our easterly storms.

Thirdly; pruning, judiciously performed, is a material aid in successful grape culture. The summer growth should not be so crowded as to prevent the free admission of light and air, nor so open as to expose the fruit to alternate sun and

rain. A moderate number of strong, healthy branches, with vigorous foliage, is better than a quantity of weak shoots, covered with half grown leaves. The aim should be to avoid both extremes, and secure long, well ripened canes, with thoroughly matured buds. A strong vine will resist mildew, when a weaker one would give way under the attack.

Lastly, winter protection is an important consideration. Until we secure perfectly hardy vines, they cannot be considered safe in our variable seasons. If the wood does not suffer, the dormant fruit buds are affected. They do not start kindly and vigorously, and a week, often a fortnight, is lost by their weakened energies from severe cold; and though the summer's growth may be vigorous enough, the fruit still lags behind. It is a thing which did not occur to us till close observation made it apparent. In a more favorable climate, like that of southern New York and Ohio, a week or ten days is of no great importance; but in New England, with frosty nights the last of September, a week gained is often the securing of an abundant crop.

HOW TO RAISE HOGS.

A. G. Mullins, of Kentucky, in a communication to the *Genesee Farmer*, offers the following hints on the raising of hogs:

Say we have a good stock to begin with—a stock that matures early and fattens well. The pigs should come from the middle of March to May. There is a great advantage in pigs coming at this time, as we can graze them through two summers, and have them to keep only through one winter. They come to be of fine size by the second fall or winter. Hogs may be pushed into market younger, but at more expense in grain, and they will be smaller at fattening time, which is a great disadvantage.

The greatest profit in hogs is in grazing them, and turning them upon grain fields, where they can gather for themselves; and having them large and in good condition at fattening time. The sows and pigs should be kept in good growing condition by feeding them on Indian corn, or corn meal made into slop. As soon as the clover begins to blossom, or a little before, turn them upon it. Sows and pigs should still be given some grain while in the clover.

WASHINGTON A YANKEE CITY.—Washington is essentially a Yankee city at the present time. In every department business is thriving to a degree unparalleled in its history. Real estate has advanced to unexpected figures, and it is a matter of impossibility to find suitable accommodations for the vast influx of business now pouring in upon us. Enterprise is now the watchword, where a short year ago inactivity and decay prevailed. Vigorous competition has reduced the price of many of the necessaries of life. Old monopolies have been scattered to the winds, and the consumer is generally benefited by the change. The Washington of to-day is totally different from the Washington of 1860. Many are unacquainted with the cause of the transformation, and look with wondering eyes at what is only a legitimate consequence.—*Washington Republican.*

EXTRACTS AND REPLIES.

A GOOD KIND OF CORN.

In the monthly *Farmer* for June last, is an account of an excellent crop of corn, by C. L. FRENCH, 2d, of Bedford, N. H. In connection with this account he spoke in such high terms of a variety of corn planted by him for the last 30 years, that I was induced to make further inquiries concerning it. Learning that several farmers of West Brookfield had planted corn the past season, procured of Mr. French, I wrote for information, and received in answer a letter from Mr. A. Keep, dated Sept. 26, from which I send you some extracts for the benefit of others, who, like myself, may be anxious to obtain a variety, both *early* and *prolific*.

He says: "In relation to the corn I procured from N. H., I can say that I planted May 29, on sandy loam, manure wholly spread, and the corn was well out of the way of an ordinary frost about the 5th of this month, the husks on some of the ears having turned white and started from the ear. It is certainly early enough. One of my neighbors planted it on a rather heavy soil on the 1st day of June, and exhibited a lot of it at our Cattle Show on the 20th inst.; the ears very large and well ripened, and his crop is very heavy.

"I gave my brother, who lives in Paxton, seed enough for perhaps 100 hills, and I saw it a few days ago; I think I never saw heavier corn anywhere. It is on *very high* land, where it is oftener the corn crop fails them otherwise, but there will be no failure in this small lot.

"I might say that most of the large ears in my field are, and have been many days, open; the husks have started and the corn ripe enough to grind."

I send the above for publication, not from any personal motive, as I never saw Mr. French or Mr. Keep, but because I believe that many farmers would be glad to know where they can obtain a variety answering the above description.

Royalston, Dec. 13, 1861. J. WOOD.

PREMIUMS FOR HERDS.

Friend SHELDON'S notion of offering premiums for herds of best improved animals, instead of single animals, is worthy of much regard. I have often known an old cow that had been strained to her utmost capacity in the production of milk, upon a statement being made that she had averaged to give from thirty-five to forty-five pounds of milk per day, for many months, to be awarded the first premium at our shows; and this with little or no regard to the quality of the milk.

It is a law of Nature that whatever is greatly extended in one direction, will come short in another. Give me the snug built, little animal, with bright eye, and milk of superior quality, in preference to any of these overgrown monsters.

I do not perceive the propriety of Mr. S.'s recommendation to do away the distinction of breeds. I had supposed these distinctions to be well defined, and very convenient for reference. I know there are some who say there is no such thing as *Native breed of cattle*—let it be so, if you please, so long as those bred and born on our hills will ever have the preference of many whose judgment is worthy of regard. ESSEX.

December 16, 1861.

YIELD OF MILK.

Having been a subscriber to the *N. E. Farmer* for years, I have often seen statements from persons, of the quantity of milk given by cows in stated periods. I annex a statement of the quantity from one cow that I have milked for one year, from Nov. 21, 1860 to Nov. 21, 1861. We used in my family what milk we wanted, and sold the balance at a store in the neighborhood, at 5 cents per quart. You will see she gave 4,967 quarts in one year, being about an average of 13 6-10 quarts daily.

She calved Nov. 15, 1860; commenced milking her Nov. 21, 1860.

10 days in November	sold at store		87	quarts.
December	"	"	306	"
January	"	"	348	"
February	"	"	308-2	"
March	"	"	338-2	"
April	"	"	369	"
May	"	"	351	"
June	"	"	354	"
July	"	"	379-2	"
August	"	"	354	"
September	"	"	302-2	"
October	"	"	210	"
21 days in November	"	"	110	"
Used in family			1146	"
			4967	quarts.
			5	cents.
			$248,35	

HENRY R. CONGDON.

Providence, R. I. Dec., 1861.

REMARKS.—Here is a product worthy of imitation.

TO PREVENT LEATHER FROM SOAKING WATER.

As the season has come when farmers are apt to have wet feet, unless they constantly wear rubber boots,—a practice which can hardly be condemned in too strong terms—I give you below a method for treating leather boots and shoes, which I know, from wearing them so treated, to be first-rate for keeping the feet dry and making the boots or shoes wear much longer than they would otherwise. It is as follows:

Melt together in a pot over a fire, a pound of tallow, a quarter of a pound of rosin, and an ounce of beeswax, to which add a teaspoonful of lamp black; when melted and mixed, warm the boots or shoes, and apply the hot stuff with a painter's brush, until neither the sole nor upper leathers will take in any more. The only caution to be observed is, not to apply the mixture so hot as to burn the leather. J. C. G.

Boscawen, N. H., Dec., 1861.

WOOL SALES—FINE WOOL.

Our sales, since April last, from 175 sheep, of the same blood, have amounted to two thousand dollars, without diminishing our numbers, while at the same time we have improved the value of the flock by reserving the best. Were I accustomed to writing for the press, I think I could say some things that would be a benefit to some of my brother farmers, and I may possibly attempt it some of these days. NATHAN BOTTUM.

Shaftsbury, Vt., Dec., 1861.

REMARKS.—With the above note we had a sample of the wool alluded to, which is very beautiful. The thistle's down could scarcely be softer. We hope our correspondent will regard the promptings of his mind, and write for the *Farmer*. Our readers want the facts of practical men.

AN EARLIER ONION WANTED.

Our farmers very generally tried the flat onion seed, sometimes called the Rhode Island onion, to a greater or less extent, the past season. The result was not at all satisfactory; the yield being generally mixed to a considerable degree with the red onion, and the crop, *without an exception*, ripening later than our standard, the Danvers Yellow. Some of the seed planted came directly from Rhode Island,—a portion was raised in the State. Can any of your readers inform us where we can obtain flat onion seed that is *as early* as the Danvers Yellow? J. J. H. GREGORY.

Marblehead, Mass., Dec., 1861.

GOV. HOLBROOK AND AGRICULTURE.

I notice in the last *Farmer* an article from the *Providence Journal* which speaks of Gov. HOLBROOK's improvements in agricultural implements, and his numerous articles on practical farming, from which I think I have received considerable benefit.

I constructed my cow stables in 1860 according to Gov. Holbrook's plan, published in the *Farmer* at that time, with a trench in the rear of the cows to put muck and other absorbents in to save the liquid manure, and I do not hesitate to say the improvement has saved me enough to pay for the *Farmer* several years. DAN RICHARDSON.

Westfield, Vt., Dec., 1861.

STODDARD'S SELF-OPERATING HORSE RAKE AND COCKER.

Can you inform me where the horse rake, noticed in the November number of the monthly *Farmer*, is manufactured, and by whom?

A SUBSCRIBER.

Stratham, N. H., Dec., 1861.

REMARKS.—The above rake was invented, and is manufactured, by Mr. J. C. STODDARD, of Worcester, Mass., and is well worth your attention, if you intend to have raking to do next summer.

For the New England Farmer.

LASTING EFFECT OF MUCK ON CROPS.

MR. EDITOR:—Right in front of my house there is a fifteen acre lot of sandy land. Forty-four years ago, a portion of this lot was treated to a heavy dressing of meadow mud. On this portion of the lot the crops have been from one-quarter to one-third greater than on the other part of the lot, although it has all been treated alike ever since. All my neighbors, for miles around, have noticed the difference in the growth of the crops on this lot, and I have explained to them the cause, and invited them to go into their swamps and draw out muck and make a compost, or spread it on their land in the fall and plow it in in the spring, in the same manner that a part of this lot was treated, and they would have no cause to go to the city for manure and cart it from six to ten miles. But from all that I have shown and said to them, I

have only persuaded two to try the experiment, as they call it. One of them has drawn from the swamp between five and six hundred ox-cart loads this fall, and the other has tried it on a gravelly piece of land and by it he has doubled the fertility of the land.

I have been digging up a piece of low swamp land and carted on a coat of sand from the high land that lays along the border, which I intend to plant in the spring to different kinds of garden vegetables on part, and slow grass on another part. As the strawberry wants considerable moisture, how would they do in such a locality? The soil is from four to twelve feet deep, and it is drained eighteen inches below the surface. I intended it for cranberries, but I find the cranberry culture has taken a new turn; that is, instead of setting the vines in low swamps, people are taking the top soil off of their poorest high land, and setting them in the subsoil. They say they bear as well as they do in low land, are not quite so large, but firmer, and not so liable to be damaged by frost.

E. LEONARD.

New Bedford, 12th Mo., 1861.

REMARKS.—Strawberries would probably flourish well on the land you described.

AGES OF THE STATES OF AMERICA.

The following chronological table may be interesting to our readers at the present crisis:

SETTLEMENTS.

1607—Virginia, by the English.
1613—New York, by the Dutch.
1620—Massachusetts, by the Puritans.
1624—New Jersey, by the Dutch.
1628—Delaware, by the Swedes and Fins.
1635—Maryland, by the Irish Catholics.
1636—Rhode Island, by Roger Williams.
1639—North Carolina, by the English.
1670—South Carolina, by the English.
1682—Pennsylvania, by William Penn.
1732—Georgia, by Oglethorp.

ADMITTED INTO THE UNION.

1792—Vermont.
1792—Kentucky.
1796—Tennessee.
1802—Ohio.
1811—Louisiana.
1816—Indiana.
1816—Mississippi.
1818—Illinois.
1819—Alabama.
1820—Maine.
1821—Missouri.
1836—Michigan.
1836—Arkansas.
1845—Florida.
1845—Texas.
1846—Iowa.
1848—Wisconsin.
1850—California.
1858—Minnesota.
1858—Oregon.
1861—Kansas.

OUR NEW DRESS.—The reader will, we hope, notice the bright and beautiful dress in which the *Farmer* appears, this month,—the older eyes will, we are quite sure. We cannot *spread* our dress as some fair creatures do, but can present it to the reader with a clean *face* and correct *form*, so that it will be grateful to the eye and clear to the understanding. The publishers will spare no pains to make the *Farmer* valuable in every respect.

For the New England Farmer.

SCRAPS FROM MY DIARY.

The Weather—Application of Fertilizers—Fruit Trees in New England—Placed Here to *Learn*, as Well as to Earn—Borers—Ashes Around Fruit Trees—Market Reports.

As the winter thus far has been very open, farmers have improved the time in various ways. I see some drawing manure to their meadows, and others into their young orchards, around the trees. It is very amusing to me to see how the great majority of farmers apply fertilizers to their fruit trees. I should as soon apply an Indian meal poultice to a pig's ears to fatten him.

Most of the fruit trees in New England are on grass land. Farmers want to get too many kinds of crops from the same land to ever get any good ones; therefore the more surface is fertilized, the less grass they will get; so they dig in their fertilizers from the body of their trees each way, enriching about one-fourth part of the surface under the tree, and the smallest fourth. They may apply what the soil wants, to keep good what the roots have taken from it to grow the wood and fruit of the tree; but it will be accidental, purely, with most of them, if they do, for they have too much to think of to investigate such small matters. If we tell them their land wants what it can only get from lime, ashes, or some other special manure, they tell us they have carried on this same farm forty years, and don't want any of our advice. I should know they had carried it on a good while, from appearances around the premises.

After trees grow to be eight or ten inches through, the roots that do the most good, are eight or ten feet from the body—the fine, fibrous roots. Now if instead of caring for and supplying these fine, fibrous roots with the various ingredients they want to grow wood and fruit from, we cut them off or rob them of what little they would get from the air, &c., what can we expect? Small profits from our land, and no profit from our trees. It will be well to remember that we were placed here to learn, as well as earn.

I see the borers are destroying many young apple trees about Saxonville, and would advise persons to look well to their trees. I take a sharp knife, and small wire, a foot long, and make war with them, cutting out what I can, always cutting up and down the tree, with the bark, and not across it, and punch to death what I cannot cut out. The eggs are laid very near the surface of the ground, under some old, loose piece of bark; hence the necessity of keeping the tree scraped clean; and a pile of ashes around the bodies, three or four inches high, has always kept them away from my trees. I put the ashes around in the month of May, and first of August scatter them under the trees and put around more, the next May and August doing the same, and until trees are eight inches through. As for quantity, I never have used enough to injure a tree, and have used from four to sixteen quarts, according to the size of tree, in a year, for several years in succession.

A man some nineteen miles from Boston, told me yesterday he had only had one number of the *Farmer*, and was satisfied that only the reports of the markets last week had saved him his subscription. He was a rich and intelligent man, and wants to improve his mind as well as land and

circumstances. Such a man takes some comfort in living, and it does one good to meet and converse with such. F. J. KINNEY.

Worcester, Dec. 18, 1861.

THE SEASON.

It is rarely the case that the farmer enjoys so favorable an opportunity for closing up his "fall work," as he has had the present season. The weather for nearly the whole month of November was such as to enable him to engage in plowing, ditching, gathering materials for the compost heaps, getting out rocks, hauling out manure, or in building, or planting or pruning trees. This mild and dry weather has continued to the present time, Dec. 21, and now the drought in many places begins to pinch. Wells are dry that have yielded a plentiful supply of water for many years past, the small streams are quite low, and some of them, dignified with the term river, are much below their usual stage at this season.

The mild state of the weather through the autumnal months had the effect of ripening the wood of the trees and shrubs, so that they will be quite likely to stand the changes of the winter months without being injured. Our losses within a few years past have been very severe by the sudden and wide extremes that have taken place in the temperature. The peach and cherry trees are nearly all cut off, the quince has suffered, as well as many of the shrubs, and last winter seriously affected the Baldwin apple trees in many localities. We hope these extremes will have some compensations for us in the destruction of myriads of insects by the changes themselves, or from the want of food caused by the shortness of the crop.

Wherever we have visited in New England during the fall months, we have found many farmers busily employed in some of the items of labor which we have enumerated, and all agreeing in opinion that the favorable fall weather will greatly facilitate the work of the coming spring.

The winter grains, wheat, barley and rye, have had time to get well rooted, are generally looking well, and will be quite likely to escape being winter-killed. We have seen two or three pieces of winter barley that are exceedingly fine.

"THE WAR AND THE FARMER.—We call the attention of every reader to an article in another column on this subject, and especially of those who are inclined to be despondent and doubt our ability to crush the present rebellion, carry on successfully one or two wars beside, if pushed to the wall, and feed the starving Irish when the English people prefer to be fighting with us rather than feeding the paupers which her rapacity has made.

We see no cause for discouragement—some for anxiety—but none for despondence—but everything to cause us to "rejoice always," so long as we strive to do right. We have the most lively faith that "Providence is shaping our ends, rough hew them as we will;"—that he will carry us through this fiery trial by the unflinching energy of our free people, and that they will show the world that we fully appreciate our unparalleled blessings, and are ready to sacrifice anything but duty for them.

Let us, then, individually, seek strength and guidance from that Fountain of all supplies, which the President sought when he started for Washington, and made his first addresses to the people of Springfield and Indianopolis. From that moment, we have had confidence in him as a fitting leader for our people.

LADIES' DEPARTMENT.

DOMESTIC RECEIPTS.

PLAIN CUSTARD.—Boil a pint of milk, in which place two ounces of sugar, the thin peel of half a lemon; break in a basin four eggs, beat them well with a fork, then pour in the milk by degrees, not too hot; mix it well, pass it through a cullender or sieve, fill cups with it, which place in a stew-pan, on the fire, which contains one inch of water; leave them for about twelve minutes, or till set, which is easily perceived.—*Soyer.*

COFFEE, COCOA, OR CHOCOLATE CUSTARD.—Make some very strong coffee, beat the eggs as above; put in a pan half a pint of milk and half a pint of made coffee, with two ounces of sugar, then add the eggs, pass through a sieve, and proceed as above. Chocolate and cocoa the same, only omitting the lemon peel in all three.—*Soyer.*

YORKSHIRE PUDDING.—Beat up two eggs in a basin, add to them three good table-spoonfuls of flour, with pint of milk, by degrees, and a little salt; butter the pan, bake half an hour, or bake under the meat; cut it in four, turn it, and when set on both sides it is done. A tin dish, one inch and a half deep and eight inches wide, is the most suitable for such proportion.—*Soyer.*

TO PICKLE CAULIFLOWER.—Cut it up into small pieces; boil in salted water till done, throw it into cold water awhile, then put into your jar of mixed pickles.

HOW TO MAKE CORN GRIDDLE CAKES.—Almost every one is interested now in knowing how to make corn cakes most palatable, since so much of it will be used in these straitened times. The following is said to be an excellent receipt:—Scald at night half the quantity of meal you are going to use, mix the other with cold water, having it the consistency of thick batter; add a little salt and set it to rise; it will need no yeast. In the morning the cakes will be light and crisp. Skimmings, where meat has been boiled, are best for frying them with. Fry slowly.

MILK TOAST.—Place the milk to heat, mix a tea-spoonful of flour smoothly with a little milk, stir it in, and let it come just to a boil, with a piece of butter the size of an egg to a quart of milk;

and some salt. Place your toast in a deep dish, and cover it with this gravy. Thin cream, omitting the butter, makes a nicer dish for those who are so fortunate as to have it to use.

BEEF PIE.—Make a nice crust, a little richer than for biscuit; chop up pieces of the boiled round of beef, when you have them cold; season with salt, pepper and butter, and onions if you like; line the basin with crust, rolled about half an inch thick; fill the beef, moistened with gravy or water; dredge in a little flour, cover, bake half an hour.

CURE FOR EARACHE.—An exchange paper recommends the following as a certain cure for the earache: Take a small piece of cotton batting, or cotton wool, make a depression in the centre with the end of the finger, and fill it with as much ground pepper as will rest on a five cent piece, gather it into a ball and tie it up; dip the ball into sweet oil and insert it in the ear, covering the latter with cotton wool, and use a bandage or cap to retain it in its place. Almost instant relief will be experienced, and the application is so gentle that an infant will not be injured by it, but experience relief as well as adults.

A DISTINGUISHED physician, who died some years since in Paris, declared: "I believe that during the twenty-six years I have practiced my profession in this city, 20,000 children have been carried to the cemeteries, a sacrifice to the absurd custom of exposing their arms and necks."

YOUTH'S DEPARTMENT.

THE TOOLS GREAT MEN WORK WITH.

It is not tools that make the workman, but the trained skill and perseverance of the man himself. Indeed, it is proverbial that the bad workman never yet had a good tool. Some one asked Opie by what wonderful process he mixed his colors. "I mix them with my brains, sir," was his reply. It is the same with every workman who would excel. Ferguson made marvellous things—such as his wooden clock, that accurately measured the hours—by means of a common penknife, a tool in everybody's hands, but then everybody is not a Ferguson. A pan of water and two thermometers were the tools by which Dr. Black discovered latent heat; and a prism, a lens, and a sheet of pasteboard, enabled Newton to unfold the composition of light and the origin of color. An eminent foreign *savant* once called upon Dr. Wollaston, and requested to be shown over his laboratory, in which science had been enriched by so many important discoveries, when the doctor took him into a study, and, pointing to an old tea-tray on the table, containing a few watch-glasses, test-papers, a small balance, and a blow-pipe, said: "There is all the laboratory I have!" Stothard learnt the art of combining colors by closely studying butterflies' wings; he would often say that no one knew what he owed to these tiny insects. A burnt stick and a barn-door served Wilkie in lieu of pencil and canvas. Bewick first practiced drawing on the cottage-walls of his native village, which he covered with sketches in chalk; and Benjamin West made his first brushes out of the cat's tail. Ferguson laid himself down in the fields by night in a blanket, and made a map of the heavenly bodies, by means of a thread with small beads on it, stretched between his eye and the stars. Franklin first robbed the thunder-cloud of its lightning by means of a kite made with two cross-sticks and a cross handkerchief. Watt made his first model of the condensing steam-engine out of an old anatomist's syringe, used to inject the arteries previous to dissection. Gifford worked his first problem in mathematics, when a cobbler's apprentice, upon small scraps of leather, which he beat smooth for the purpose, while Rittenhouse, the astronomer, first calculated eclipses on his plow-handle.—*Smiles' Self-Help.*

EVIL SPEAKING.

One night, I remember it well, I received a severe lesson on the sin of evil speaking. Severe I thought it then, and my heart rose in childish anger against him who gave it; but I had not lived long enough in this world to know how much mischief a child's thoughtless talk may do, and how often it happens that talkers run off the straight line of truth. S—— did not stand very high in my esteem, and I was about to speak further of her failings of temper. In a few moments my eye caught a look of such calm and steady displeasure, that I stopped short. There was no mistaking the meaning of that dark, speaking eye. It brought the color to my face, and confusion and shame to my heart. I was silent for a few moments, when Joseph John Gurney asked very gravely:

"Dost thou know any good thing to tell us of her?"

I did not answer, and the question was more seriously asked—

"Think, is there nothing good thou canst tell us of her?"

"O, yes, I know some good things; but—"

"Would it not have been better, then, to relate those good things, than to have told of that which would lower her in our esteem? Since there is no good to relate, would it not be kinder to be silent on the evil? For charity rejoiceth not in iniquity."

A MOTHER'S KISS.

A day or two since, a ragged and dirty-looking boy, fourteen years of age, pleaded guilty in the Superior Criminal Court to having fired a building. For two years past, since the death of his mother, he had wandered around the streets a vagrant, without a home or human being to care for him, and he had become in every respect a "bad boy." A gentleman and a lady interested themselves in his behalf, and the latter took him one side to question him. She talked to him kindly, but without making the slightest impression upon his feeling, and to all she said he manifested the greatest indifference, until she asked him if no one had ever kissed him. This simple inquiry proved too much for him, and bursting into tears he replied—"no one, since my mother kissed me." That one thought of his poor dead mother, the only being, perhaps, who had ever spoken to him kindly before, touched him to his heart, a hardened young criminal though he was. The little incident caused other tears to flow than his.